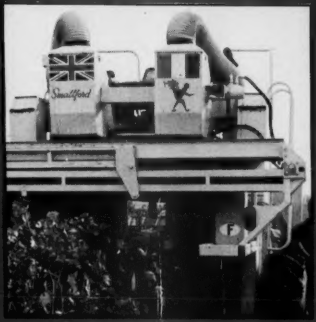
Trade and Industry

16 September 1977 [illegible] Friday 35p

Patterns of taxation

Collisions at sea

Ford's new plant in south Wales



Market report on south-west France

US controls on chemicals

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Survey of export prospects

Companies' rate of return on capital employed 1960-76

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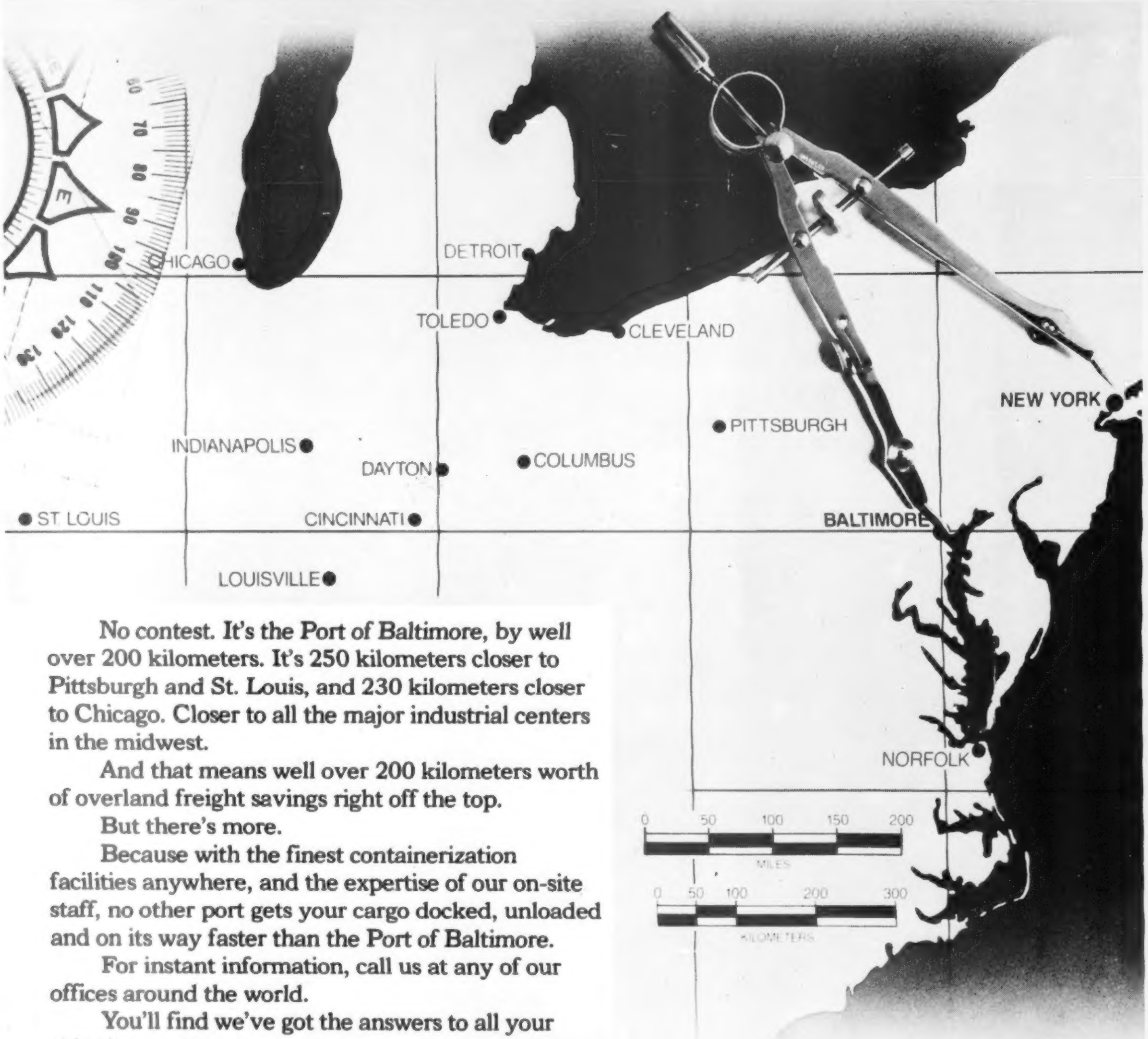
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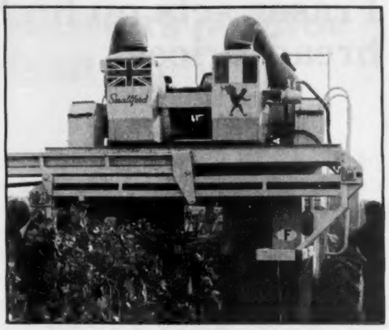
Trade and Industry

16 September 1977

News from the Departments of Industry·Trade·Prices & Consumer Protection



The third *Trade and Industry* regional market report on France is set in the agriculture-dominated south-west where the medium term prospects for industrial development look good, page 505. Fords of Britain are to build a £250 million engine plant at Bridgend, page 484. Light is shed on the belief that Britain is more highly taxed than it used to be, page 492. Science explains some puzzling maritime disasters, page 495.

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ABC

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From 19 September, all advertisement inquiries and bookings should be addressed to our Advertisement Department at 13 Great James Street, London WC1, telephone 01-242 9478.

Trade and Industry this week

HOME

Computer scheme to aid small firms

Consultants are to be financed through a new Department of Industry scheme to discover whether computer aids for management of production in small manufacturing firms are likely to be viable. The main objectives are to encourage serious consideration of the use of computer aided production management (CAPM) by small to medium sized manufacturing companies with up to about 500 employees and to accelerate growth in the availability of competent consultancy able to help such small firms both to study and implement CAPM systems.

Many small companies may not have experience of using computer systems, perhaps other than for accountancy purposes, and thus be unaware that CAPM systems could be applied to their production management problems. The basic aim of the scheme is to relieve the company of some of the risk entailed in carrying out a feasibility study to explore if a CAPM system could be of benefit, by funding a consultant to carry out this task. The scheme which is financed by the Department of Industry will last for three years and is administered and monitored by the Blacknest Production Control Group (PCG), whose parent organisation is the Atomic Weapons Research Establishment, Aldermaston.

Those eligible to apply are independent consultants who are not connected with computer manufacturers or the prospective client company. Prospective user companies can also seek advice on the scheme directly from the Secretary, Production Control Group, Blacknest Centre, Brimpton, Nr Reading, Berks RG7 4RS, tel. 07356 4111, ext. 5951.

Education placed in industrial strategy

Courses, satisfactory to students, should also meet the needs of manufacturing industry but not concentrate on engineering and applied science to the exclusion of other important subjects such as, for example, the physical and biological sciences, economics and computing which also make an important contribution to the economy, says the government in reply[1] to the Third Report of the Select Committee on Science and Technology. A white paper, published on 13 September, welcomes the select committee's report which, it says, represents a valuable contribution to the current debate on the relationship between education and industry. It emphasises the government's intention that, in addition to industrial policies, educational and other policies should contribute to its industrial strategy.

Empty places in science and technology departments are disappearing and an increase in annual admissions of about 4000 students over the next two or three years should be sufficient to fill those which remain. There are already signs, says the white paper, that institutions are beginning to attract a greater proportion of students of high ability and motivation.

A number of recent initiatives designed to increase the flow of suitably qualified personnel into industry are set out in the white paper including new first degree courses with a pronounced orientation towards manufacturing industries; the launching of the unified vocational preparation pilot schemes; the Science Research Council teaching company scheme; and the proposed industrial scholarships to be planned and financed jointly with industry.

The white paper refers to other activities contributing to the continuing debate, including the discussion paper, 'Industry, Education and Management' prepared by a group of officials (*Trade and Industry*, 29 July 1977), the recently announced committee of inquiry into the engineering profession and the study of professional engineers by the British Association for the Advancement of Science.

Examination of prices ordered

Bank charges, books, footwear, proprietary medicines and animal feeding-stuffs are now to be the subjects of the next sectoral examinations made by the new Price Commission.

Following his statement on 1 August, (*Trade and Industry*, 5 August 1977) Roy Hattersley, Secretary of State for Prices and Consumer Protection has now directed the commission to act.

Advertisements for 'Trade and Industry'

From 19 September, all advertisement inquiries and bookings should be addressed to our Advertisement Department at 13 Great James Street, London WC1, telephone 01-242 9478.

Fraser acts on high bread prices

John Fraser, Minister of State for Prices and Consumer Protection appealed to the local weights and measures authorities on Monday, 12 September to help control bread prices during the interruption in normal supplies of bread to retail outlets.

He said that allegations had been made that consumers in some areas were being asked to pay prices which were far in excess of the maximum prices which might legally be charged under the current provisions of the Bread Prices (No. 2) Order 1976. These provisions did not, of course, generally affect direct sales to consumers by master bakers whose operations were subject to the price code. Regional officers of the Price Commission had, however, been asked to give priority to any complaints which fell within this category.

BNOC participates in Buchan field

The Department of Energy, the British National Oil Corporation (BNOC) and the companies in the Buchan Group signed heads of agreement on 9 September on state participation in the group's interests in licence P241, covering blocks 21/1 and 21/6, in which the Buchan field is located.

Under the definitive agreements which will implement these heads BNOC will have an option to acquire, at market prices, up to 51 per cent of the petroleum produced from the licensed area attributable to each of the companies, except BP.

The agreements will also provide for BNOC to become a party to licence P241, and associated operating agreements, and to have an effective vote.

Oil spill test off Shetland

The Department of Trade is to hold an oil pollution exercise off Shetland on 20 and 21 September to test the contingency arrangements for dealing with a major oil spill in that area.

In the exercise (code name Guizer) oil will be assumed to have leaked from a Ruritanian tanker 'Ineptity', following a valve and pipeline failure while she is transferring oil cargo internally to adjust the vessel's trim. About 800 tonnes of oil will be lost before the discharge is stopped, causing an oil slick 3 miles long by 1 mile wide, in a position 25 miles south east of Lerwick. (No oil will be used in the exercise.)

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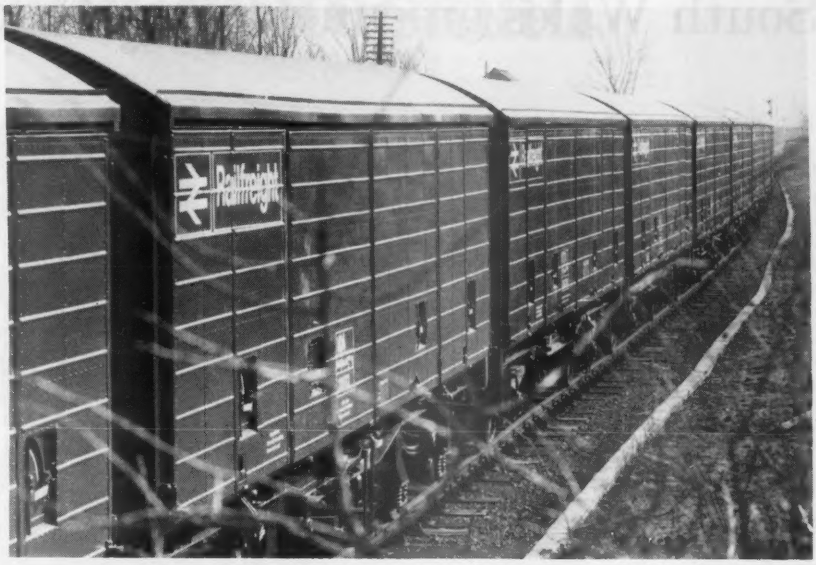
[1] 'University – Industry Relations' (Cmnd 6928), HMSO' price 50p.

Peter Parker launches Speedlink

Peter Parker, chairman of British Rail, this week launched 'Speedlink', a new national network of high-speed services for freight in less-than-trainload quantities. Aimed at lorry-size loads, the new Railfreight Speedlink services, with their 75 mph guaranteed overnight services, have already won over half a million tonnes of entirely new traffic to rail and British Rail is confident that by the end of next year both the number of services and tonnage carried will double.



EUROPE

Ministers devalue green kroner

EEC agriculture ministers agreed to commission proposals to devalue the Danish green kroner by 5 per cent when they met briefly in Brussels on Tuesday, 13 September.

Following the meeting, the minister of Agriculture of Fisheries and Food, John Silkin, who led the UK delegation, said that he had made the point that changes in green currency rates were primarily a matter for the country concerned but possible consequent trade distortions needed to be considered. At his suggestion the commission had agreed to make an objective report by the beginning of October on the distorting effects of monetary compensatory amounts on trade in pigmeat and other sectors.

Mr Silkin said that he had obtained an undertaking from the Danish minister, in the event of the study proving that there was distortion in the pigmeat sector, that he would not reject out-of-hand, proposals to remedy the situation.

ESA satellite launch aborted

Early reports of the launch of the European Space Agency (ESA) first communications orbital test satellite, by Delta 3914 vehicle from Cape Canaveral, at midnight on 13-14 September indicate that the rocket vehicle developed a fault shortly after lift-off. It was destroyed after 50 seconds, for safety reasons.

The possibility of launching a second satellite will be considered when the ESA Joint Communications Board meets on 22-23 September.

OVERSEAS

Sao Paulo invisibles conference

Financial services of the City of London are to be presented to Brazilian businessmen at a three-day conference in Sao Paulo next week, starting on Monday, 19 September. Sponsored by the Committee on Invisible Exports in conjunction with the Economic Affairs Committee of Canning House and the British Overseas Trade Board, it is the second of its kind to be held in Brazil, the first being in Rio de Janeiro in 1974.

Sir Jasper Hollom, deputy governor of the Bank of England, and Sir Francis Sandilands, chairman of the Committee on Invisible Exports, will be heading a distinguished team of speakers from the City of London and altogether over 30 representatives from the City's major banking, broking and insurance houses will be attending.

The return visit to Brazil is designed to extend discussions to include the large banking community in Sao Paulo as well as the financial directors of the major industrial companies located there.

Korean minister visits UK

Chang Yie-Joon, Minister of Commerce and Industry of the Republic of Korea, leaves the UK today (16 September) after a two-day visit at the invitation of Edmund Dell, Secretary of State for Trade.

Mr Chang had talks with Mr Dell about furthering bilateral trade and visited Aberdeen to look at developments in North Sea oil. He was accompanied by senior government officials and a 14-man party of senior Korean businessmen led by Chung Hee Yung, president of Hyundai Heavy Industrial Co Ltd and chairman of the UK/Korean Business Promotion Committee.

In addition to his official engagements Minister Chang also spoke about Korea's economic growth and prospects for trade at the fourth joint meeting of the UK-Korea economic co-operation group and the Korean-British Business Promotion Committee, at which the members of the business mission were present.

STATISTICS

Food wholesale price index down

There was a slight fall in the provisional index for the output of the food manufacturing industries in August, the first fall in this index since April 1974. Lower prices for tea and for certain animal and poultry foods more than offset higher prices in the rest of the sector.

Figures released by the Department of Industry on 12 September showed that the provisional price index for the home sales of manufactured products increased by ¼ per cent in August.

The index for manufactured products other than food, drink and tobacco was 1¼ per cent higher, with higher prices for vehicles making the most significant contribution. This index rose 3 per cent in the latest three months compared with 4 per cent in the previous three months, and apart from November 1975, this is the smallest increase in this index over a three-month period since August 1973.

The change in the index for all manufactured products measured over a 12-month period fell, for the first time since December 1976, from 21 per cent in July to 20 per cent in August.

Home news

South Wales greenfield wins Ford engine plant

The Ford Motor Co is to build an entirely new £250 million engine plant at Bridgend in South Wales. Employing 2200 people and creating perhaps twice as many jobs in ancillary activities, the plant represents the largest single investment in Britain by an overseas company for well over a decade and possibly the largest ever in South Wales. Work on the 73 hectare (180 acre) new greenfield site is to start immediately, and when complete the plant is expected to produce in excess of £150 million worth of engines each year for export alone.

Commenting on the decision to locate the plant in Britain, Eric Varley, Secretary of State for Industry, said 'this is a major boost for our industrial strategy. Our aim has been to reverse the move away from manufacturing industry. This vast new manufacturing project will not only create vital and valuable new jobs, it has the potential to create new wealth which will in addition generate further employment. And that is what our industrial strategy is all about.

'This is the first major greenfield site development in the British motor industry since the early 1960s. It is clear evidence that Ford have confidence in the future of Britain as a base for important new investments.

'I am confident that the workforce in this new enterprise will seize this opportunity – an opportunity which is the envy of Europe – and make sure that this project becomes the showpiece of Europe'.

Ford of Britain's chairman and managing director, Terry Beckett said, 'The site has been chosen with the help of the Welsh Office and we will be breaking ground this month. It has been evident for some time that we need more engines. The demand for our products has never been stronger. We now have market leadership in the United Kingdom with cars and commercial vehicles and we have many thousands of outstanding orders'

By the time the plant comes into operation in the early 1980s, there will be a working population in the immediate travelling area of 550 000 men and women of whom 325 000 will be between 25 and 45 years of age. No less than 40 per cent will be skilled which is extremely important in the effective operation of a modern, high-technology factory. In addition there are two nearby universities and three technical colleges, all of high repute. Ford will also be able to use its existing school at Swansea for apprentice training.

The proposed development will bring together a group of three important Ford 'power train' plants in Wales and this provides for significant efficiencies in operation. All the propulsion components of Ford vehicles – including engines, drive-shafts, gearboxes and axles – are manufactured by Ford's Power Train Group and the Welsh plants will therefore be directed by the same group management.

Jim Callaghan, the Prime Minister, was delighted that the Ford Motor Company had decided to base its new engine plant in Britain, after it had considered many other countries in Europe. He said, 'I can hardly over-state the importance of this decision which has been reached by Ford after a close study of the merits of many sites and it will be particularly welcome to South Wales, where a process of industrial change is taking place.

'This new engine plant could provide work up to the end of the century and is a positive and dramatic expression of Ford's confidence in the future of investment in this country. The Ford investment by itself is a major contribution to our long-term prosperity but it will also have the added effect of encouraging big international investors to come to Britain.

'Ford have shown confidence in Britain. In return we must do all we can to justify that confidence by maintaining high productivity and reliability and good industrial relations.'

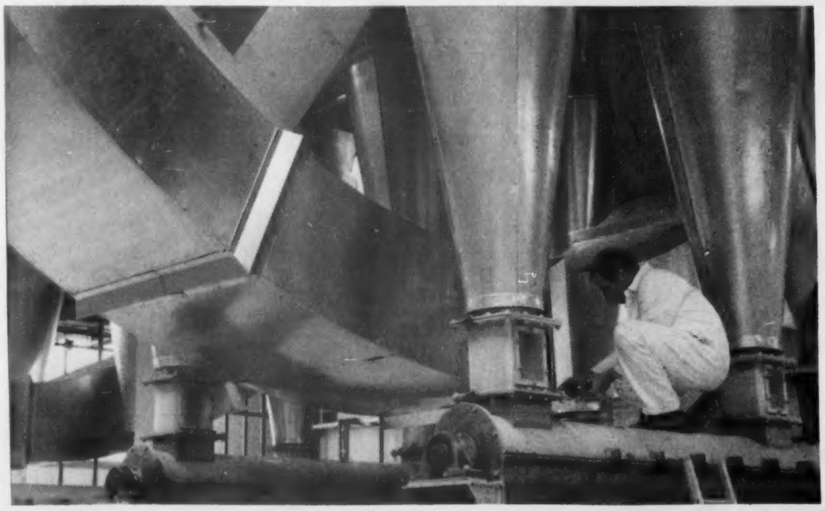
Ford's Swansea plant which makes axles for Escorts, Capris, Cortinas and Transits and transmissions for the D-series trucks, was purchased from Prestcold in 1965. Since then, two other adjacent factories have been taken over in a period of continuous expansion so that today Ford occupies a site of 38 hectares which contains 102 000 m^2 of buildings. Negotiations have now been completed to incorporate another nearby factory which was previously occupied by a steel fabricator (Dawnays) and this will increase the Swansea site by another 2.8 hectares and 7400 m^2 to the area of covered plant. Ford employs 2350 people in Swansea.

Swansea production is delivered to the Dagenham and Halewood assembly plants in the most efficient manner by British Railways trains, the 'blue trains' as they are called. Material to and from the new Bridgend site will also be routed by this speedy and effective method. In addition, the opening of the M4 extension this October, which will pass within 2½ miles of the Bridgend plant, will make essential road deliveries fast and efficient.

Ford's other existing factory in Wales is at Treforest. On a 1.2 hectare site with 6000 m^2 of buildings, this operation produces ceramics for spark plugs and employs 330 people.

Dee-Cee insulation contract for Tilbury starch mill

Dee-Cee Contracts Ltd is now nearing completion of a contract to insulate the entire production area of the new £20 million Tilbury starch mill. The complex, set on a 10 hectare site, will process maize grain from the Port of London Authority grain terminal at the rate of 1000 tonnes an hour.



Some of Britain's big performers are really quite small

Companies of all sizes received The Queen's Awards for Export and Technology this year, from an industrial giant with over 50,000 employees to companies with fewer than 16.

These Royal Honours are among Britain's most coveted industrial awards. And many companies have found benefits from the prestige associated with winning.

So if you think that your company may qualify, don't hesitate to apply. The only requirements are that you should be UK-based and have made outstanding achievements in either Exports or Technology.

To receive your application form and full details about the 1978 Awards, simply complete the coupon below and send it to The Secretary, The Queen's Awards Office, Williams National House, 11/13 Holborn Viaduct, London EC1A 1EL. Tel: 01-222 2277.

Name ______________________________

Name of Company ______________________________

Address ______________________________

______________________________ Exports/Technology/Both (delete where appropriate)

The closing date for return of applications is 31 October, 1977.

TIJ/2

ENCIRCLE TI 593 ON PAGE 527 FOR FURTHER INFORMATION

Consumer Credit Act 1974: exemption of certain agreements secured on land

Under section 16(1) of the Consumer Credit Act, the Secretary of State for Prices and Consumer Protection may by order exempt from the greater part of the controls imposed by the act consumer credit agreements of the kinds listed in section 16(2) (all of which are agreements secured on land) where the creditor is named in the order and is:

a an insurance company;
b a friendly society;
c an organisation of employers or organisation of workers;
d a charity;
e a land improvement company; or
f a body corporate named or specifically referred to in any public general act.

A notice in *Trade and Industry* on 11 March 1977 gave details of those bodies listed in The Consumer Credit (Exempt Agreements) Order 1977 and that order will be amended and extended by The Consumer Credit (Exempt Agreements) (Amendment) Order 1977 [1] which comes into force on 1 October 1977. The new order amends part I of the schedule to the earlier order by deleting the entry relating to Derby Provident Collecting Society and by omitting the word 'Limited' in the entry relating to 'The Imperial Life Assurance Company of Canada Limited'. Part II of that schedule is amended by the substitution of the word 'Livingston' for 'Livingstone'.

The following insurance companies are listed in the new order for the first time:

Abbey Life Assurance Company Ltd
British National Life Insurance Society Ltd
FS Assurance Ltd
Langham Life Assurance Company Ltd
Schroder Life Assurance Ltd
Schroder Pensions Ltd
Welfare Insurance Company Ltd

Agreements made by these insurers will be exempt agreements provided that they are agreements being:

1 a debtor-creditor-supplier agreement financing

the purchase of land, or

the provision of dwellings on any land, and secured by a land mortgage on that land;

2 a debtor-creditor agreement secured by any land mortgage financing

the purchase of land, or

the provision of dwellings or business premises on any land, or

the alteration, enlarging, repair or improvement of a dwelling or business premises on any land in a case where the creditor is the creditor under any agreement (whenever made) by which the debtor is provided with credit for any of the purposes specified in this paragraph, being an agreement relating to the land in question and secured by a land mortgage on that land;

3 a debtor-creditor agreement secured by any land mortgage to refinance any existing indebtedness of the debtor's, whether to the creditor or another person, under any agreement by which the debtor was provided with credit for any of the purposes specified in paragraph 2 above.

It is anticipated that further orders will be made under section 16(1) as circumstances warrant. Submissions for exemption may be submitted by any organisation falling within the categories a to f above and further information may be obtained from Miss P. J. Rankin, CCC2/Consumer Credit Branch, Department of Prices and Consumer Protection in Room 171, 1 Victoria Street, London SW1H 0ET, tel. 01-215 3583.

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[1] 'The Consumer Credit (Exempt Agreements) (Amendment) Order 1977' (SI no. 1977/1493), available from HMSO, price 10p.

Record earnings in service industries

Earnings from Britain's service industries reached a new peak of £2,712 million in the second quarter of 1977 according to official statistics released on 8 September, reports the Committee on Invisible Exports. This puts these earnings for the first half of 1977 24 per cent higher than in the same period last year. The travel sector was particularly buoyant, registering a half year rise of 56 per cent over earnings in the first half of last year. This rise in services helped gross private invisible earnings to a new record level of £3,665 million in the second quarter.

The net surplus on private invisible earnings improved in the second quarter, but was still slightly below the level reached in the last quarter of 1976. This was largely due to reduced earnings from interest, profits and dividends as profits earned by overseas oil companies operating in the North Sea increased and banks earned less from their eurocurrency business. Despite this, the net surplus on private invisible earnings for the first half of 1977 was 18 per cent above its level in the same period last year.

Metrication

Consternation at a chemical supplier was caused by an order for '10 Mg' of a very expensive substance. A call to the customer discovered that what he really wanted was 10 milligrams (10 mg). He had inadvertently asked for 10 megagrams (which to the cognoscenti, is 10 million grams).

There are still apparently a few metrically ill-educated eccentrics who mistakenly record '10 ms' for 10 metres, when what it really means is 10 milliseconds. They should of course write '10 m'.

For schools . . .

The Metrication Board is now tackling this problem at the roots by publishing 'How to Write Metric' a new guide [1] for teaching and using SI units.

In 1965, when the government decided to adopt metric units it was also decided to

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[1] 'How to Write Metric' is a 36-page booklet available from HMSO, 49 High Holborn, London WC1V 6HB, from Government Bookshops and through booksellers. ISBN 0 11 700867 2. Price 50p each net or 50 copies for £20.00 net, postage extra.

Carbon fibre mast

What is claimed to be the world's first carbon fibre mast being lifted in the Vickers-Slingsby works in Yorkshire, prior to being fitted to *Condor 77*, a new 40.6 tonne yacht built for international racing. *Condor 77* was designed by John Sharp with the assistance of members of the Concorde design team. The 30.4 m carbon fibre mast is approximately 40 per cent stronger and 181.3 kg lighter than an equivalent aluminium alloy mast and affords 20 per cent reduction in windage. It has been laminated from Courtaulds HT uni-directional carbon fibre and a Shell epoxy resin.

adopt, as far as possible, a particular version of the metric system, the international system of units (SI). This version is now being used throughout the world in science, technology, industry and commerce and its universal use should help to avoid confusion in international trade and scientific work.

In the foreword Professor McGlashan admits however that 'There are rules and guidelines for using SI and these are perhaps not as widely known and observed as they should be'.

The new style guide is primarily designed for teachers of pupils up to the age of 16, to examiners in science and mathematics, and to authors and publishers of text books, in the hope that they will find it a reasonably comprehensive guide to agreed international practice.

... and for scientists

With technically minded adults in mind, the National Physical Laboratory has now published 'SI The International System of Units'[2], the translation by C. H. Page of the National Bureau of Standards and P. Vigoureux of the National Physical Laboratory of the third edition of the French text prepared by the International Bureau of Weights and Measures (BIPM). The book gives definitions of the 'base units' of many 'derived units', and of the two 'supplementary units'. It also contains a list, and gives the equivalent in SI units, of a number of units which, although outside the system, like the day, hour, and minute, are retained for use with it.

[2] 'SI The International System of Units', HMSO. 54 pages, £2.00 net. ISBN 0 11 480045 6.

Accountants discuss problems with Inland Revenue

The Consultative Committee of Accountancy Bodies has issued notes of a meeting held with the Inland Revenue to discuss various procedural matters. It was pointed out that recent reorganisation of the revenue management structure and the current review of appeals procedures should improve liaison between inspectors and collectors. Any problems should be taken up with the relevant district inspector.

It was also established that interest on overdue tax cannot be remitted even if caused by postal delays; the only way to avoid interest is to ensure that tax is paid when due, and postponement should be requested only when it is certain that there will be no tax liability. However the revenue has agreed to consider making the position clearer in the notes issued to taxpayers.

While every effort is made to avoid the issue of estimated assessments when actual figures have been agreed, if this does happen the accountant should always appeal and apply for postponement.

The new appeals procedures announced last year have meant that more time is allowed before delay cases are put down for hearing. Accounts sent in by accountants very shortly before a hearing by the commissioners can cause problems and in such cases accountants should contact the inspector before assuming that their attendance is not necessary. If the required information is received the inspector is unlikely to oppose an adjournment.

The revenue also pointed out that submission of tax computations by accountants in standardised form would save time and unnecessary difficulties for all concerned.

Interest on overdue estate duty and capital transfer tax

The Consultative Committee of Accountancy Bodies has also issued a guidance note in connection with interest on overdue estate duty and capital transfer tax.

Copies of the CCAB notes 'Inland Revenue Procedures' reference TR 249, and 'Interest on overdue estate duty and capital transfer tax', reference TR 248, are available from the Publications Department, PO Box 433, Chartered Accountants' Hall, Moorgate Place, London EC2P 2BJ. Please send a stamped and addressed envelope.

Industry and education in midst of revolution

Further education had strong traditions of co-operation with industry, had seen many revolutions and was in the midst of another, following the establishment of the Technician Education Council (TEC) and the Business Education Council (BEC). Industry, the wealth-creating sector, needs happy, healthy, skilled workers, Gordon Oakes, Minister of State for Education and

Government sales

29 September 1977—Miscellaneous

Location
Hilltop Motor Hotel, London Road, Carlisle

Auctioneers
Harrison and Hetherington (Dept L), Borderway Mart, Rosehill Carlisle (0228 26292)

The stores lying at 14 MU, RAF Carlisle, and other sites in the north of England comprise clothing, engineering and machine tools, electronic equipment, cameras, watches, furniture, vehicles and other miscellaneous items.

1 October 1977—Furniture

Location
Ordnance Support Unit, Catterick, North Yorkshire

Auctioneers
Bartle and Son (Dept L), 52 Merrion Street, Leeds 2 (0532 450898)

The sale consists of small or single item lots of furniture.

Catalogues which give details of the lots, conditions of sale, viewing times, etc. are available from the auctioneers from two weeks before and up to the day of the sale, price 40p, postage 15p (postal orders only).

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Industrial Auctioneers and Surveyors

ANNOUNCE THEIR FUTURE AUCTION PROGRAMME

Date	Description	Location	Client
15 Sept.	Candle manufacturing	Strabane, N.I.	Scan Candles
16 Sept.	Motor Vehicles	Manchester	Several
21 Sept.	Carpet manufacturing	Runcorn	Bremworth Carpets
22 Sept.	Garment manufacturing	Omagh, N.I.	Several
22 Sept,	Contractors plant	Bolton	C. & M. Smith
28 Sept.	Garment manufacturing	Rochdale	Alderglen
5 Oct.	Feed and flour milling	Newport Pagnell	Francis Coales
26 Oct.	Caravan/woodworking/ stocks	Morecambe	Vickers
26 Oct.	Extensive modern factory (57 000 sq ft)	Morecambe	Vickers
27 Oct.	Factory premises (33 000 sq ft)	Burnley	Veevers
27 Oct.	Industrial/warehouse premises (6 950 sq ft)	Preston	Duckworth
3 Nov.	Woodworking	Blackburn	Boothman
3 Nov.	Modern workshops (4 000 sq ft)	Blackburn	Boothman
In near future	Chemical plant	Northwich	I.C.I.

Catalogues and appointments to view:

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Science, told the Standing Conference of Regional Advisory Councils for Further Education in Scarborough on 8 September.

The aim was to equip industry to face a competitive world in which British industry was failing to keep pace. Since 1963 the UK share of major industrialised countries' exports had fallen from 15.3 per cent to 9.3 per cent. The positive approach was to create a climate for reversing this trend, Mr Oakes said. TEC had 7000 students on new courses. About 40 000 would be embarking on TEC courses within the next few weeks and BEC's new courses were expected to be available in 1978.

Mr Oakes spoke of the importance of the part-time route to qualification to the young man or woman planning a career in industry, and referred to the sad decline in the proportion of qualified engineers who had come up via part-time study. The number gaining passes in part-time higher national certificate courses in engineering fell from 9654 in 1966 to 4848 in 1975. The trend to full-time courses, particularly among engineers, might be a natural and inevitable change; a response to the altering nature of jobs in industry and to young people's aspirations.

He discussed the Unified Vocational Preparation (UVP) pilot schemes. They were very experimental and aimed to discover the type of educational programme which would develop skills of benefit to employee and employer. Experience had shown that the approach was right. About a dozen schemes were launched during the first year. He added, 'We are exploring the possibility of linking about 20 UVP schemes to the work experience programme (WEP) of the Manpower Services Commission to give young people participating in WEP the benefit of general preparation for school to work transition; and the right work experience for those involved in UVP.'

On further education and the unemployed Mr Oakes said education and training were an integral part of the government's strategy on employment. His department had secured resources to enable local education authorities to provide 9000 additional places in further education; 3600 places would be provided in 1978-79. A further two stages would bring the number to 9000 in 1980-81. If further and higher education was to respond to industry's needs it must itself be working efficiently. As chairman of the working group on the management of higher education, Mr Oakes could report that progress had been good.

Labour statistics for 1975

British labour statistics relating to 1975 are set out in the seventh [1] of the series of year books compiled by the Department of Employment.

Subjects covered include wage rates; hours of work; retail prices; employment; unemployment; vacancies; family expenditure; membership of trade unions; industrial disputes; industrial accidents; employers' total labour costs; costs per unit of output; and output per person employed. Regional analyses of many items are also included.

Where appropriate, comparative figures covering 10 years are included. Many of the tables have already appeared in the *Department of Employment Gazette*, but they have now been brought together in one volume for easy reference. Some of the tables contain new material which became available after the original publication.

The year books supplement the information contained in *British Labour Statistics: Historical Abstract 1886-1968* the standard work of reference, published by HMSO in June 1971. The previous volumes of the year books cover 1969 to 1974 inclusive.

Pump testing courses

Pump testing methods will be the subject of a two-day course to be held at the Department of Industry's National Engineering Laboratory, East Kilbride, Glasgow, on Wednesday, 12 October 1977 and Thursday, 13 October 1977. It will be preceded by a one-day course on pumps and fluid mechanics on Tuesday, 11 October. The two-day course is aimed at engineers concerned with testing pumps and assessing pump performance. It will include sections on noise and vibration, standards and performance scaling. Provision of test circuits and equipment, requirements for flow measurement, pressure measurement and power measurement, instrumentation, statistics, International Standards Organisation and British Standards Institution specifications, and performance evaluation will be covered.

The two-day course is designed for the engineer with a reasonable knowledge of pumps and their performance. The one-day course will be for those who require an introduction to the subject. Further information from: Conference Section, National Engineering Laboratory, East Kilbride, Glasgow G75 0QU, tel. 03552 20222, ext. 433.

Pallet movement control

A one-day conference will be held on Tuesday, 22 November 1977 at the May Fair Hotel, London, to develop the conclusions of the recent report on the usage and wastage of pallets which was commissioned by the Department of Industry and carried out by the National Materials Handling Centre.

The report analyses the current usage of pallets in the UK, the numbers manufactured annually and the losses from deterioration and other causes. It comments on ways of adapting existing and proposed systems of pallet movement control in order to reduce the total costs of pallet usage.

The conference is being organised by the Department of Industry in association with the Timber, Packaging and Pallet Confederation (TIMCON) and the Institute of Materials Handling.

Copies of the report will be available some time before the conference and its findings and implications will be the subject of the opening session. Amongst the subjects examined by subsequent sessions will be the performance requirements for pallets; the need for expendable pallets; single level distribution systems, controls and developments; pallet control in the retail, distribution and allied trades. Each conference session will be introduced by a lead speaker and then thrown open for general discussion.

The conference fee of £15 includes buffet lunch and a copy of the report. For more information on the conference please contact: The Secretariat, Committee for Materials Handling, Department of Industry, Room 540, Abell House, John Islip Street, London SW1P 4LN, tel. 01-211 4078.

Degree day service: figures for August

Degree day figures for August, published by the Department of Energy, are shown below. This service is designed to help industry and commerce improve the efficiency with which space systems are used.

The figures are a record of the extent and length of time in a particular month that the external temperature fell below a base figure of 15.5 degrees C (60 degrees F). Because this affects the amount of fuel needed to provide a given level of space heating the figures can be used to check on the efficiency of heating systems. By comparing the amount of fuel used with the number of degree days in monthly periods of different years, energy managers and others can monitor the performance of heating plant and operate it more economically.

Detailed information about the system is contained in a free booklet *Degree Days* (No. 7 in the Fuel Efficiency series) available from the Library, Department of Energy, Thames House South, Millbank, London SW1P 4QJ, tel. 01-211 3394. It explains the theory and practice of using the figures and contains a map showing the locations of the 17 Meteorological Office stations and the regions covered.

AUGUST DEGREE DAYS (BASE TEMPERATURE 15.5 DEGREES C)

Region	Calculated average for Aug 1957/76	August 1976	August 1977
Thames Valley	27	19	24
South East	48	45	42
Southern	42	43	41
South West	31	20	34
Severn Valley	34	26	33
Midland	51	47	57
West Pennines	43	27	40
North West	56	41	63
Borders	72	57	72
North East	50	44	54
East Pennines	42	39	44
East Anglia	43	35	42
West Scotland	63	58	65
East Scotland	71	54	80
North East Scotland	86	59	91
Wales	43	21	47
Northern Ireland	63	43	65

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[1] 'British Labour Statistics: Year Book 1975', HMSO, price £20.00.

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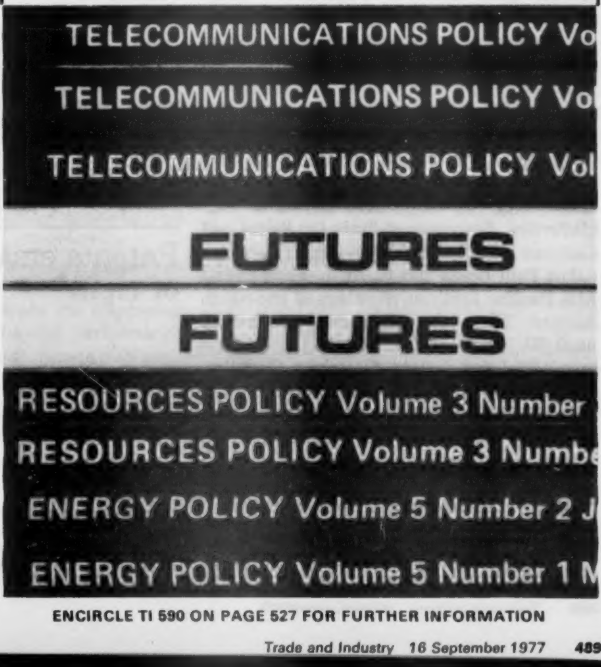
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Three more factories for Hebburn

The English Industrial Estates Corporation announced on 6 September that work had just been started on three more advance factories for the Department of Industry at Victoria Road, Hebburn, Tyne and Wear. Two of these factories are of 1350 m² (15 000 sq ft) each and the other is a 900 m² (10 000 sq ft) unit.

A contract worth more than £350,000 has been awarded to Turriff Ltd, of Durham. Architects for the project are Ainsworth Spark Associates of Newcastle upon Tyne and the quantity surveyors are J. W. Summers and Partners also of Newcastle. The premises should be ready for occupation in April 1978.

Clearance of merger proposals

Roy Hattersley, Secretary of State for Prices and Consumer Protection has decided, on the information at present before him not to refer the following proposed mergers to the Monopolies and Mergers Commission under the provisions of the Fair Trading Act 1973: Aurora Holdings Ltd/Coltness Group Ltd; Ellerman Lines Ltd/Tollemache and Cobbold Breweries Ltd; and Thomas Borthwick and Sons Ltd/Matthews Holdings Ltd.

Official appointments

Adviser on trading standards: Robert Edwin Kilsby has been appointed to the new post of Adviser on Trading Standards to the Department of Prices and Consumer Protection. The functions of the post will be to develop closer co-ordination between the department and local authority trading standards departments and to advise the department on enforcement of consumer protection legislation. Mr Kilsby, who is expected to take up his new appointment shortly, is at present Controller of Trading Standards for Surrey County Council.

Electricity Consultative Council: Roy Hattersley, Secretary of State for Prices and Consumer Protection, has appointed councillors Paul Lewis and R, M. I. Thomas and Mrs Pauline Leith as members of the South Eastern Electricity Consultative Council until 30 June 1980, and Colin George as a member of the Eastern Electricity Consultative Council until 30 November 1979.

Post Office Users National Council: Roy Hattersley, Secretary of State for Prices and Consumer Protection, has appointed Mrs J. E. Wallis as a member of the Post Office Users' National Council until 31 December 1980.

English Tourist Board: Edmund Dell, Secretary of State for Trade, has appointed Colin Gray to be a member of the board of the English Tourist Board for the period to 30 September 1979. He has also reappointed Sidney Royle to be a member of the board for a further period of two years, also to 30 September 1979.

Insurance Companies Act 1974: authorisations and revocations

The following authorisations to carry on insurance business in Great Britain were issued by the Secretary of State for Trade under section 3(1) of the Insurance Companies Act 1974 during the period 1 August to 31 August 1977:

Name of insurer and registered office or address in GB	Country of incorporation if outside GB	Date of authorisation	Class or classes of insurance business for which authorisation was issued
Kyoei Fire and Marine Insurance Company (UK) Ltd Minster House Arthur Street London EC4R 9BJ	—	2.8.77	PL, PROP
Maltese Cross Insurance Company Ltd 3 Lombard Street London EC3V 9AQ	—	10.8.77	LIAB, MV, PL, PA, PROP

The following authorisation to carry on insurance business in Great Britain was revoked by the Secretary of State for Trade under section 9 of the Insurance Companies Act 1974 during the period 1 August to 31 August 1977:

Name of insurer and registered office or address in GB	Country of incorporation if outside GB	Date of revocation	Class or classes of insurance business for which authorisation was revoked
Household and General Insurance Company Ltd 1 Bartholomew Lane London EC2N 2AB	—	10.8.77	LIAB, MAT, MV, PL, PA, PROP

Classes of business

I	Industrial assurance business
LIAB	Liability insurance business
MAT	Marine, aviation and transport insurance business
MV	Motor vehicle insurance business
OLT	Ordinary long term insurance business
PL	Pecuniary loss insurance business
PA	Personal accident insurance business
PROP	Property insurance business

Patents endorsed 'licences of right'

Under section 35 of the Patents Act 1949 the following patents were endorsed 'licences of right' on the dates specified.

5 September 1977

1377091 Hitachi Ltd
Electron gun structure
1391953 Hitachi Ltd
Compound photo-conductive structure and method of manufacturing the same
1400810 Hitachi Ltd
Electron gun assembly with improved unitary lens system
1404659 Hitachi Ltd
Post deflection acceleration type colour cathode ray tube
1405899 Hitachi Ltd
Method of forming secondary electron emission preventing layer for post-deflection acceleration type colour picture tube
1409428 Hitachi Ltd
Cathode-ray tube
1419174 Hitachi Ltd
Composite magnetic film
1421983 Hitachi Ltd
A light exposure apparatus for formation of striped phosphor screens of colour picture tubes
1425713 Hitachi Ltd
Method of pattern formation
1428321 Hitachi Ltd
Imagine target for photoconduction type image pickup device
1430702 Hitachi Ltd
Electron gun assembly for colour cathode-ray
1433291 Hitachi Ltd
Method of manufacturing a colour picture tube
1446744 Hitachi Ltd
Improvements in the production of tungsten wire coils
1447886 Hitachi Ltd
A method for forming a phosphor screen for a colour picture tube and compositions for use therein
1448705 Hitachi Ltd
Method of forming a secondary electron emission preventive film and television colour picture tube containing the same
1449148 Hitachi Ltd
A method for electrocoating metal surfaces with carbon
1452113 Hitachi Ltd
Magnetron anode structure
1452307 Hitachi Ltd
Magnetron
1454916 Hitachi Ltd
Electron gun assembly for colour picture tube
1455719 Hitachi Ltd
Method for making phosphor screen for black matrix type colour cathode ray tube
1459823 Hitachi Ltd
In-line electron gun assembly for colour picture tube
1462205 Hitachi Ltd
Improvements relating to a phosphor screen for a post deflection focusing type colour picture tube
1017006 Malew Engineering Ltd
Blanking die assemblies
1033326 Malew Engineering Ltd
Notching and cropping die assemblies
1036769 Malew Engineering Ltd
Bolster plates for blanking and like dies
1118971 Malew Engineering Ltd
Press tool
1284664 Globe Union Inc
Improvements in liner motion variable resistance controls
1289376 Globe Union Inc
Improvements in environmental protection for electrical circuit assemblies
1403111 Globe Union Inc
Improvements in or relating to packages for semiconductor chip electronic circuits
1302978 Roger Robert
A device for discharging lengths of material from a work table
1345801 Glaenzer Spicer
A coupling for transmitting rotary movement
1328478 Sanroy Development Company Inc
Insulating plug
1443422 EMI Ltd
Improvements relating to methods of making printed circuits and printed components
1438845 Brush Switchgear Ltd
A holder for an electrically conductive member

Any person who claims that the patentee at the time of endorsement of any of the above patents was precluded by a contract in which claimant is interested from granting licences under the patents may apply for cancellation of the endorsement on patents form no. 45 within two months after the date of endorsement.

E. Armitage, Comptroller

Prices restriction revoked

The Price Commission have revoked the notice issued on 22 April 1977 under section 6(2) and (3) of the Counter-Inflation Act 1973 to XL Real Estate Ltd of Upper King Street, Leicester, requiring the company to restrict prices.

New publications

Business opportunities in Nigeria

By size of population among the developing countries of the world, Nigeria ranks third after Indonesia and Brazil. In terms of economic growth it is reputed to be the fastest moving country in Africa. The opportunities for British exports are considerable.

Particularly welcome, therefore, is Metra Consulting's new business survey of the country. Broadly similar in approach to other Metra *Business Opportunities* surveys, it demonstrates a first hand knowledge of Nigeria, presumably by virtue of the publisher's company in that country. The author is not afraid to be critical, where necessary, and after a brief background summary, deals with the third national plan, Nigerian industries, the environment for foreign companies, trading with Nigeria and setting up a business there.

Included in the appendices are lists of 'pioneer industries', merchant banks, insurance companies, solicitors, accountants and architects, as well as accounts of the Nigerian enterprises promotion decree 1977 and the Nigerian budget 1977/78.

Nigeria is a difficult country to document adequately for the businessman, this volume will therefore doubtless have a wide usage.

Nigeria: Business Opportunities by Metra Consulting. (144 pages. Metra Consulting Group Ltd, 23 Lower Belgrave Street, London SW1W 0NS. 1977. Ringbound. £82.00. ISBN 0 902231 07 3.)

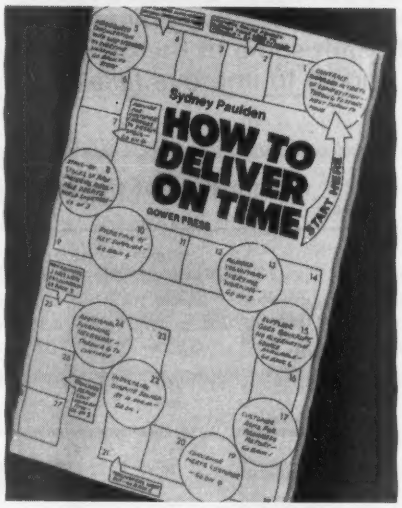
New survey of British drug manufacturers

A new survey of the pharmaceuticals industry and its major British manufacturers has recently been published by Jordan Dataquest. Included in the survey is a 60 page analysis of the industry, together with an investigation of its short-term prospects compiled by Hoare Govett Ltd. Financial data on some 219 United Kingdom companies is provided for the last two years.

Tabulations on sales, exports, profits, as well as brief asset breakdowns are among the data provided. More detailed treatment is given to 50 of the more significant companies. Unlike most stockbroker surveys, this report also examines many private and subsidiary companies, including various large unquoted firms. The publisher conveniently provides a list of companies with full addresses and the names of the chief executives. There is also a glossary of terms employed in the presentation of the financial data. The compilers of the survey have attempted to present the individual company accounts in as detailed a form as the varying accounting methods and differing principles on which they are based will allow.

The British Pharmaceuticals Industry. Jordan Dataquest. (136 pages. Jordan Dataquest, Jordan House, 47 Brunswick Place, London N1 6EE. Paperback. £60.00. ISBN 0 85938 079 3.)

Stand and deliver



'A British manufacturer of trailers offers customers two choices: a trailer with British components, but no stated delivery date; or one with German components, a guaranteed delivery date but a surcharge of £600. Over 90 per cent of his trailers are sold with German components'. This is just one example given by Sydney Paulden in his latest book which aims to help companies improve their delivery record.

The author advises the individual company on how to remedy this situation. He sets out a methodical approach examining and advising on each of the major problem areas, including the control of original promises, arranging prompt delivery of supplies, maintaining production and distribution schedules. There is useful discussion of labour relations and communications between departments.

Based on real life examples and actual case histories, the author provides in a few pages some worthwhile suggestions for improving an aspect of British industrial performance that has received some unfortunate publicity.

How to Deliver on Time, by Sydney Paulden. (120 pages. Gower Press. 1977. £6.00. ISBN 0 566 02075 0.)

It's happened before

The publishers John Calder have chosen the topical subject of inflation for the latest volume in their series, *Platform Books*. Inflation is by no means a new phenomenon and the various contributors attempt to place the subject in its historical context as well as examining it from the contemporary view point.

Thomas Mann gave a short personal account of the inflationary period in Germany between 1913 and 1923 in his *The Witches' Sabbath* included here. Also reprinted is Andrew Dickson White's survey of the inflationary period which preceded and accompanied the French revolution and post revolutionary period. An American writer, Walt Rostow, put an historical perspective on the British inflationary scene with some suggestions for its cure.

In addition to these historical accounts of specific instances of inflation, 'A record of inflation' by Michael Jefferson takes a worldwide look at the phenomenon, both past and present. The collection ends with a discussion of future prospects. This look back at the various past inflationary periods should be of interest to students of economics and history, as well as to the more general reader.

Inflation, by Michael Jefferson, Andrew Dickson White, Thomas Mann and Walt Rostow. (192 pages. John Calder. 1977. Hardback. £5.95. ISBN 0 7145 3539 7. Paperback, £2.25. ISBN 0 7145 3547 8.)

Labour relations for engineers

A working party was recently set up by the Institution of Production Engineers to take a close look at industrial relations as they affect the working members of the institution. A guide has been produced as a result, aimed specifically at the practising member.

It briefly examines the major aspects of the worker/manager relationship, including such topics as communications, industrial democracy, industrial relations code of practice and procedure agreements. Each subject is dealt with under numbered headings. Terms are defined clearly and useful practical examples are given to illustrate points where necessary.

Certain major topics such as trade unions and the legal aspects of industrial relations might also have been examined more closely. However for the manager in industry or commerce, who has neither the time to study the ever-increasing complexities of the industrial relations scene, nor the assistance of a professional personnel officer, this book should prove a helpful aid.

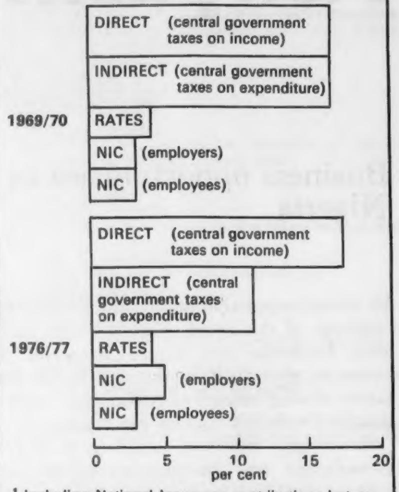
Industrial Relations for Production Engineers and Managers. (32 pages. Institution of Production Engineers, Rochester House, 66 Little Ealing Lane, London W5 4XX. 1977. £3.75.)

Patterns of taxation

Many people firmly believe both that Britain is more highly taxed than other countries, and that it is more highly taxed than it used to be. Neither of these beliefs is altogether true as it stands. What is true is that more of our tax is levied direct on the income of the payer. An article, published in the Treasury's *Economic Progress Report* of September 1977, looks at what has been happening to the tax pattern in recent years. It also describes what the government has been doing over the past year to shift some of the burden back from direct to indirect tax and so to improve take-home pay and incentives.

The balance of taxation

Taxation [1] as a proportion of national output [2]



[1] Including National Insurance contributions but excluding capital taxes.
[2] Gross national product at factor cost.

Total tax paid by the British taxpayer, measured as a proportion of national income, has averaged around 40 per cent over the past decade, in line with other industrial countries.

Within the total however the emphasis has shifted noticeably from indirect taxes, which fall on final expenditure or enter the cost of production, to direct taxes on income, mainly personal income tax. The position is illustrated in the chart, and in table 1. In accordance with the procedure followed in drawing up the national accounts, taxes on capital are not included, since the capital on which the tax is paid is not included in national income (defined as current price gross national product at factor cost). The classifications of central government direct and indirect taxes as a whole are set out in table 3.

In 1969/70 direct and indirect taxation were fairly evenly balanced. This was plainly the case with the taxes levied by the central government on income and expenditure. By 1976-77 the pattern had become fairly severely distorted by inflation. Many more people now pay income tax, as higher money incomes bring them over the tax threshold, now considerably lower in real terms than it used to be even a few years ago, and many more pay tax at the higher rates. In its extreme form this phenomenon shows up in the overlap which now exists between taxable incomes and supplementary benefit levels.

The effect of inflation

Apart from drawing increasing numbers of people into the income tax net, inflation means that once liable taxpayers find an increasing proportion of their income becomes subject to tax, and at increasingly high rates, without their necessarily receiving any increase in real income.

With high rates of inflation this is inevitable unless tax allowances are raised in line with inflation. This is the phenomenon known as 'inflationary fiscal drag'. The other side of the coin is 'inflationary fiscal boost' which continuously erodes the revenue from those indirect taxes or specific duties which are levied at a fixed sum per quantity of the good being purchased. With rising price levels the fixed sum then represents an ever decreasing proportion of the money value of the item in question. Here again if this is not to happen the chancellor must take deliberate action to raise the rate. Although chancellors do of course frequently raise rates of duty on such items, for example tobacco and alcohol, and raise tax thresholds, this has not been sufficient to offset the effects of inflation, which have therefore resulted in the shift in emphasis from indirect to direct taxation which shows up in the chart and in table 1. By no means all indirect taxes on expenditure are specific. VAT is in effect indexed to inflation, as it is fixed at a percentage rate of the value of goods and services sold. But a sufficient pro-

Table 1 Composition of the tax[1] burden

Per cent

	1969/70	1976/77 (provisional)	1977/78 (estimated)
Direct central government taxes on income	39	44	41
Indirect central government taxes on expenditure	39	27	29
Rates	8	10	11
National insurance contributions:			
Employers	7	11	11
Employees	7	8	8
Total taxation	100	100	100

Sources: *Annual Abstract of Statistics, Financial Statement and Budget Report 1977-78.*
[1] Excluding taxes on capital.

Table 2 The tax burden

As percentage of gross national product at factor cost in major industrial countries

	1974	
	Including social security contributions	Excluding social security contributions
I		
Denmark	53.4	52.4
Norway	52.9	37.7
Netherlands	50.6	30.4
Sweden	49.1	39.4
France	41.1	24.9
Canada	39.7	35.9
UK	38.7	32.0
USA	32.0 [1]	24.3 [1]
II		
West Germany	42.5	29.0
UK	38.0	31.4
Japan	24.6	20.0

[1] 1973.
Note: The figures in part I of the table are drawn up according to the UN's new (1968) system of accounts. Some countries do not issue figures in this form. Part II uses the former UN system of accounts (a comparable UK figure is shown). Capital taxes are excluded in both.
Source: *Economic Trends,* November 1976.

Table 3 Central government taxes

Revenue £ million

	1976/77 (provisional)
Taxes on income	
Income tax	18 039
Surtax	30
Corporation tax	2 587
Petroleum revenue tax	5
Total	20 661
Taxes on expenditure	
Value added tax	4 240
Oil	2 400
Tobacco	2 150
Alcoholic drink	2 050
Betting and gaming	315
Car tax	250
Other revenue duties	10
Protective duties	690
Agricultural levies	135
Stamp duties	320
National insurance surcharge	1 159
Vehicle excise duty	1 068
Total	14 787
Capital taxes	
Capital gains tax	330
Development land tax	5
Estate duty	70
Capital transfer tax	320
Total	725
TOTAL	36 173

Sources: *Financial Statement and Budget Report,* HM Treasury.

portion are fixed at a specific rate for these distortions to arise.

Income tax

Twenty-five million people now pay income tax, as against 20 million in 1973-74. And there has been a substantial increase in the numbers paying higher rates of income tax and investment income surcharge. In 1972-73 between 300 000 and 400 000 people paid surtax. The comparable figure for those paying higher rates of tax and/or investment income surcharge (which have replaced the old surtax) had reached well over 1¼ million only three years later.

How we compare with other countries

Together with the high marginal tax rates imposed on any extra income earned all this means that our tax burden feels more painful even though it may not be so in actual fact. We can see from table 2[1] that our tax burden was lighter than that of many developed industrial nations in 1974 (the latest figures available), with the notable exception of Japan. In particular the Scandinavian countries are a good deal more heavily taxed than we are. This is particularly so when social security contributions are included. These are not strictly speaking a tax, but, as compulsorily levied by the government, tend to be regarded as such by the payer, and are generally treated as such in this article. It is the case that in Britain an unusually high proportion of our tax receipts come from direct taxes on income as compared with most of these other countries.

Government action

The government is fully aware of the imbalance which has developed in the tax pattern, and is anxious to correct it. It recognises that the increasing burden of direct tax, especially when taken together with the national insurance contributions, may have become a disincentive to effort. Measures for reducing this burden will be helped by keeping public expenditure firmly under control, notably by way of the cash limits and strict monitoring enforced by the government over the last year or two.

The chancellor's proposals at the time of the March budget to raise tax allowances and cut the basic rate of income tax were altered during the Finance Bill's progress through parliament, but the final result was some £2¼ billion of income tax relief, much the same as originally put forward (see *Economic Progress Report*, August 1977, where the Finance Act provisions are set out, and the final tax provisions described). As well as cutting the basic rate of income tax by one point to 34 per cent and raising tax allowances, the Finance Act raised expenditure taxes – vehicle excise duty, heavy oil duty, and tobacco duty. Obviously distortions which have developed over a number of years cannot be eliminated suddenly or fast. But a start has now been made on reversing the imbalance which has developed between direct and indirect tax, and should have an immediate effect in 1977-78, as table 1 shows.

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[1] The table gives only a general idea of the position. Different methods of classification make international comparisons difficult.

Catalogues of government publications

Her Majesty's Stationery Office offer their customers a comprehensive service which will enable them to judge whether any other titles in the vast output of government publications would help them in their work or leisure. Full information about this service can be obtained by sending a postcard to Publicity Section, Her Majesty's Stationery Office, Room C46, Atlantic House, Holborn Viaduct, London, EC1P 1BN, asking for the CATALOGUE SERVICE LEAFLET.

Economic Trends Annual Supplement

The monthly *Economic Trends* is well known. But did you know that the Central Statistical Office also publishes an *Annual Supplement* which provides a unique source for long runs of quarterly and annual data for the key series of economic indicators?

Some 300 series are included rebased to give continuous runs for as far back as possible in the post-war period. About half span 25 years or more.

The *Annual Supplement* comes as part of the annual subscription to *Economic Trends* (£28.72 including postage), or can be purchased separately price £1.95 (by post £2.31).

Please send your orders to Her Majesty's Stationery Office, PM1C (ZT9), Atlantic House, Holborn Viaduct, London EC1P 1BN. Government publications can be bought from the government bookshops in London, Edinburgh, Belfast, Manchester and Bristol, or through booksellers.

See Yellow Pages for your nearest stockist of government publications.

HMSO BOOKS

Guidance Notes from the Health and Safety Executive

These replace the Technical Data Notes (TDN) published by HM Factory Inspectorate and the series of *Notes of Guidance* published by the Chief Employment Medical Adviser. The former were not normally available to the public and the latter were restricted to registered medical practitioners. The new Guidance Notes are published by HMSO and priced at 30p each.

They are divided into five groups which should cover all foreseeable areas of concern, and the old TDN and CEMA Notes are being progressively fitted into these groups, the titles of which are self-explanatory. The General Group contains guidance on subjects relative to all the others.

Standing Orders can be accepted for each group, or for the whole series. They should be sent to HMSO (PT3C), PO Box 569, London SE1 9NH, quoting the reference shown below and your HMSO Account number. If you do not have an account, a deposit of £10 should be sent.

Medical Group	x17.06.23
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HMSO BOOKS

Technology news

Getting the most out of road transport – TRRL annual report

Introducing the Transport and Road Research Laboratory's annual report for 1976 [1] Alec Silverleaf, director of the Transport and Road Research Laboratory at Crowthorne, Berkshire, said, in a reference to North Sea oil, 'There is a need to assess all possible alternative propulsion fuels for road vehicles in the eventual post-oil age.'

The main sections of the report deal with transport, highways and structures, traffic engineering and safety, and the overseas unit.

Comparative reviews of the increase in car ownership in Great Britain and overseas have been made. The rate of increase in Britain has decreased from 10 per cent per year to 4 per cent, but figures indicate that the potential driving population is much greater than at present. Although population density is greater in Britain than in the United States, it has been shown that this alone will not stop car ownership rising to the United States level, approximately double the level in Britain. The new, more general, model has been devised based upon historic trends in many countries, and this shows that the saturation level is not likely to be closely approached until after the end of the century.

The report also mentions results derived from an experimental cycle route network in Portsmouth which are being used to assist in the design of similar facilities in other large towns. The experimental route of 6.3 km of designated residential roads has been in public use for eight months. During the period, motor traffic decreased by 46 per cent and cycle traffic increased by 15 per cent, the latter in spite of a seasonal decline in the general level of cycling in Portsmouth of more than 20 per cent. Of 100 cyclists interviewed 52 were unconditionally in favour of the routes, 32 liked them and 14 did not. A minority of residents and shopkeepers felt that the cycle routes had affected them adversely.

The transport needs of people walking in recreational areas have not been ignored but have been researched in co-operation with the Countryside Commission. A design study for a 'road train' consisting of a minibus-type vehicle towing up to three passenger-carrying trailers has been completed. The laboratory also monitored the Dales rail experiment of the Yorkshire Dales National Park Committee and co-operating bodies. Chartered trains ran between West Yorkshire and Appleby, stopping at disused stations in the National Park. The aims were to provide a service to and from the park for people without cars, and fares were restricted so as to compare favourably with petrol costs of alternative road user transport. This survey indicated significant further potential of the rail service to replace visits by car.

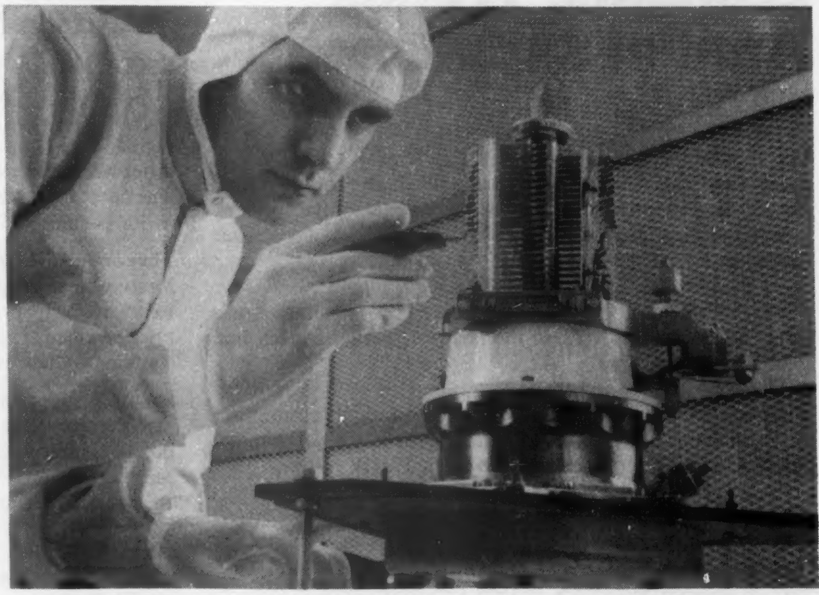
The notion of reducing traffic noise is always a popular pursuit and a TRRL programme jointly with vehicle manufacturers has been mounted to test the viability of quiet versions of commercial vehicles in terms of manufacturers' and users' costs. The programme forms a basis for possible future legislation on noise limits and will provide industry with design information to enable such limits to be met.

The environment might also be improved if some products were transported by pipeline, and more information is required to extend the range of materials suitable for conveying as hydraulic slurries. TRRL contracts to measure the power requirements in pumping coarse slurries are in progress, and further work will be required to study abrasion effects and to examine the application of this transport system to particular materials.

An initial forecast of energy needs suggests that natural oil resources will run out within the life span of motorways and other infrastructures now being built; a substitute for oil will be required in the UK and many other industrialised countries before the year 2025. As an alternative, liquid fuel derived from coal appears on present knowledge to have a cost advantage over high energy density batteries, whereas the latter have a slightly greater efficiency. If coal is available, the indications are that most road transport will continue to use a liquid fuel, but all options must be kept open. For the shorter term, studies in fuel economy are in progress.

Deteriorations in site conditions can seriously affect the capacity of heavier types of earth-moving plant, so TRRL have set up tests to assess a 'moisture condition' parameter which can be applied to various types of soil, from clay to sand. 'Moisture condition' has been related to the single-pass rut depth produced by medium-sized twin-engined scrapers. The test can provide a basis for estimating the productivity of earth-moving plant. The investigation is being extended to assess the crushability factor of chalk, which can cause problems with the operation of construction plant.

Tribology centre tests satellite components



A low speed solar array drive for the orbital technology satellite is assembled in a 'clean room' at the European Space Tribology Laboratory (ESTL) at Risley in north-west England. Part of Britain's National Centre of Tribology, it is currently engaged on a four-year contract to the European Space Agency to carry out an intensive programme of tests on both experimental and flight models of satellite components. Tribology is the science and technology of interacting surfaces in relative motion and is largely concerned with friction, lubrication and wear. The National Centre of Tribology, Risley, Warrington, Cheshire, WA3 6AT, offers industry a consulting service on all aspects of tribology including design and selection of materials, research and development services. It has available various test facilities to ensure that the right materials and designs are used to produce long life and low wear at minimum cost.

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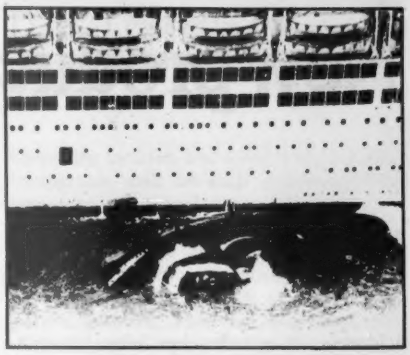
[1] Transport and Road Research 1976. Published for the Transport and Road Research Laboratory (Department of the Environment/Department of Transport) by HM Stationery Office. Copies may be obtained from HM Stationery Office, 49 High Holborn, London WC1, or through any bookseller, price £3.75 ($6.49 in USA); by post £4.07½p. Orders by post should be addressed to PO Box 569, London SE1.

Collisions at sea

A scientific explanation has now been offered for certain maritime disasters which had puzzling features in common. Jennifer Clarke reports.



In the past an element of mystery has surrounded certain collisions at sea, involving cases such as coming alongside or overtaking. In the subsequent legal disputes there has often been conflict on the question of rudder action, one side arguing that the course taken by the other vessel could only be be explained if her helm had been put over to the opposite direction to that claimed by their opponents.

Now research carried out by Dr Ian Dand at the National Maritime Institute goes a long way towards resolving the enigma – at the same time throwing new light on a succession of accidents all involving these apparent contradictions.

This research has centred round the phenomenon of 'interaction', defined as the effect of one ship on the handling of another due to the forces and moments induced. It is a term which also includes the effect on a ship of the proximity of the sea bed or a bank, and also the fact that a stationary moored ship can be caused to move on her moorings by a ship passing nearby.

If one common factor has tended to be disagreement over the position of the helm, another has been the length of the subsequent legal proceedings. No doubt this was because the evidence of witnesses seemed incompatible, but as the most recent cases are still sub judice it is safest to start with a historic example.

In 1942 when the *Queen Mary* was a troop ship she was doing zig-zag manoeuvres in the Atlantic with the cruiser HMS *Curacoa*. Suddenly the *Curacoa*, which had been close to the larger ship, took a sheer right in front of the bows of the *Queen Mary* and was cut in two. It was kept very quiet at the time but after the war, model experiments were carried out to try to discover whether perhaps 'interaction' between the two ships might have caused the disaster. Results were inconclusive although at the same time the Navy were carrying out some tests in deep water and resolved that it was possible to have interaction between two ships at sea but that the phenomenon although unpleasant was controllable. These tests paved the way for the rules on 'Replenishment at sea' and since then running ships on parallel courses for refuelling in deep water has become common practice. What was not recognised, however, was that the forces due to interaction became much more powerful if the water was shallow. As a ship moves there is a volume of water looking for a way of escape in various directions, including under the ship's bottom, but in shallow water this escape route is constricted so that a greater volume of water forces its way round the ship's sides.

'Interaction' is perhaps an innocent sounding word but the consequences can be devastating. More recently, acting for the Department of Trade, the National Maritime Institute was asked to investigate a collision in foreign waters between two ships in the navigation channel of a large estuary in which a large number of people had been killed. On the face of it, there appeared to be no reason why the two ships, one of which was British, should have collided. The weather was perfect, the waters were not crowded, but a significant fact was that the dredged channel had shallow banks on either side. The Liberian inquiry suspected the collision was contributed to by the effects of shallow water and this gave rise to the research requested by Marine Division, Department of Trade. By reconstructing a model of the channel, it was found that if model ships were sent too close to the banks, they suddenly took a pronounced sheer or turn almost out of control away from the banks, and in one case one model turned away from the bank, went across and hit the other.

But ships can not only interact with banks, they can also interact with each other.

It was becoming clear that accidents could be caused by interaction and that there had been quite a lot of casualties or near misses which had previously been put down to poor ship handling or to a feature of a particular ship at a particular time. In some cases, for instance with the *Curacoa*, it had even been suggested that the engines must have been put into reverse to explain why the cruiser swung to port, when the rudder had been 16 degrees to starboard.

It was then decided to do systematic model tests in shallow water and a Trinity House pilot asked whether this could include the effect of ships on tugs since tugs are often obliged to get close to the bow of a ship.

If a tug and a ship are both moving forward side by side on a parallel course it was found that as the tug draws up towards the forebody of the larger vessel she is under the influence of strong interaction.

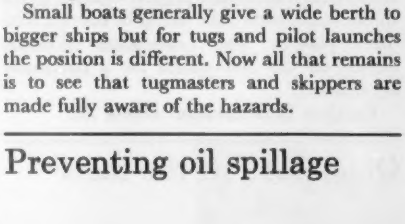
In this position the tug is in fact simultaneously being slowed down and having her bow pushed out away from the larger ship, so in order to maintain a parallel course she has to steer in towards the larger vessel and put on a lot of extra power to counteract the resistance barrier. If the tug moves forward to overtake, the forces due to interaction from the big ship suddenly change direction dramatically. There are, in fact, 'danger' areas round the bow and the stern of the larger vessel where a completely different set of forces needs to be counteracted. If the tug is not prepared for the change, she may be dragged across the bows of the ship she is accompanying. Unfortunately the models were only demonstrating a type of accident that had already occurred. The only way to lessen the forces due to interaction is, apparently, to reduce the speed of both vessels.

Work on interaction in general is not entirely new, in fact discussions on the phenomenon started as early as 1909. NMI have now extended this work to include shallow water effects. Realising the importance of their findings for safety at sea NMI have now made a film on the subject called 'Interaction', which runs for 22 minutes and is available from the National Maritime Institute, Feltham, Middlesex TW14 0LQ. The Department of Trade has also produced Merchant Shipping Notice M792 in co-operation with NMI which gives practical advice to mariners based upon the research undertaken.

Small boats generally give a wide berth to bigger ships but for tugs and pilot launches the position is different. Now all that remains is to see that tugmasters and skippers are made fully aware of the hazards.

Preventing oil spillage

Hoses designed to prevent oil spillage are prepared for their journey to the North Sea where they will be used in Britain's oilfields. Saflote hose, made by Dunlop Oil and Marine Division, Grimsby, incorporates a secondary reinforcement integrally within its walls, which is unstressed in the normal operating conditions of the hose. The primary carcase performs the functions of bearing the stresses and strains imposed by the offshore environment but should it fail the secondary carcase then takes on the role of containing the oil.



New products

Freepost reader service

For further information on items in this section, circle the corresponding number on the reader services page near the end of the magazine.

Wire and cable insulation

Solderless wiring techniques (often known as wire-wrap) where the wire is automatically wrapped onto a connector, call for a thin yet strong insulation with good sliding properties. In addition the constant demand for more and more miniaturisation needs insulation that will stand higher temperatures in a smaller space.

Compared with other thermoplastics the fluoropolymers now being made by the Pampus group of companies in Newcastle have good insulation values over a wider temperature range (for PTFE and PFA from −190° to 260 °C for example). Apart from the better known PTFE (polytetrafluoroethylene) there are PFA (Perfluoralkoxethylene), FEP (flourinated ethylene propylene), ETFE (ethylene tetrafluoroethylene), PVDF (polyvinylidene fluoride).

Each has its own properties which determine the most suitable choice for a particular application, but in general these materials achieve high insulation properties using much thinner insulation than would be needed with other plastics. The firm offers technical advice on the best choice for a particular application.

Further information: circle 733

Quick look at the facts

A new style computer-aided system, designed to help management maintain closer day-to-day control of their businesses, has been announced by Racal-Redac of Tewkesbury Ltd, specialists in interactive computer aided design systems.

The new system, known as the Redac Executive, provides fast access to vital up-to-date information on all the factors which affect a company's financial situation. It cuts from days to minutes the time taken to assemble all the facts which are essential for management to accurately plan important projects and to assess cash flow.

Traditional data processing systems are often inflexible with high running costs and requiring specialist personnel. The Redac Executive, however, can be used by any member of staff after a few days of training. It runs on a DEC PDPII computer which occupies only a few square feet of floor space. Information is fed into the system via visual display units in key departments and users can communicate freely with it handling their own input and output.

It gives a managing director the advantage of an up-to-date print-out of the financial position of his company at any time. He can also use the system to produce a budget which includes current and projected information from all departments and this budget can be updated at any time.

Further information: circle 734

Portable emergency light

A new industrial portable inspection floodlight for localised emergency or inspection work has been introduced by Tildawn Electronics Ltd, the safety lighting engineers at Alcester, Warwickshire. The light uses dry or rechargeable type batteries, and the lamp can be tilted.

Further information: circle 735

Swing head grinder

For those companies who require flat components to a reasonable accuracy and in large quantities, a swing head grinder is often the most economic solution. To satisfy this requirement, RK International Machine Tools of Erith, Kent, has introduced the Minini RV 350.

It has a 200 mm diameter cup-wheel which is powered by a 4 hp motor. The motor is built into the spindle head and incorporates special high speed bearings. To ensure that the wheelhead runs absolutely perpendicular to the table, adjustment screws are built into the mounting.

Further information: circle 736

Y-ARD computer services extended

Additions to the computer services available to the shipping industry and other organisations interested in maritime transportation have been announced by Y-ARD Ltd, the Glasgow-based international marine consulting engineers.

The first, called INVAPS, is a financial evaluation program using established investment appraisal techniques, for either single-ship projects or for a combined fleet operation. INVAPS is of particular value to those organisations which do not have their own computing facilities, but wish to undertake an extensive appraisal which would otherwise take up an unacceptable amount of time.

The second, TANDS, is an extension of Y-ARD's existing trim, stability and longitudinal strength programs and presents ship operators with the opportunity of obtaining a multipoint access to ship stability and longitudinal strength information without the need to purchase expensive one-off calculators for loading/discharge calculations. Work is already in hand on the preparation of data for 41 ships in the new-construction programme of a major overseas shipping company.

Both programs are available using Y-ARD's own computer installation. From a suitable terminal, they can also be run via telephone land line to the Systemshare Computer Bureau in Edinburgh, or, in most cases, can be adapted to suit the client's own computer.

Further information: circle 737

Industrial radiation dose-meter

Designed specifically for use in industrial radiography, a radiation dose-rate meter from Testrade Ltd of West Drayton is light, portable, weather-resistant, and rugged enough for heavy duty. Measuring 185 mm × 122 mm × 85 mm, and weighing only 0.9 kg, the U3B needs no calibration in use as the manufacturer's calibration against caesium 137 gives ±20 per cent of full-scale accuracy over the temperature range −5 °C to +50 °C.

Operating ranges are 0-1000, 0-100 and 0-10 mr/h in three logarithmic scales arranged to give the 0.75 mr/h (non-classified personnel) and 2.5 mr/h (classified) readings towards mid-scale. Standard batteries provide the unit's power, and a battery life of over 1000 hours at three hours a day usage is claimed. Meter response is designed to give stable indications at low radiation levels, while maintaining a response time of 85 per cent of final indication within 10 seconds.

Further information: circle 738

Bench enclosure ensures low-noise

Following experience accumulated in more than 10 years of noise-control development, this bench enclosure system has been specifically designed to reduce acoustic emission generated in inherently noisy finishing and fettling areas by the Noise Control Centre, Melton Mowbray. Readily assembled by unskilled operatives, the unit's all steel construction ensures a robust design, more than capable of withstanding rigorous industrial conditions. Lined internally with a physically protected sound-absorbent material and vibration damping compound, it provides a dramatic reduction in overall area noise levels by up to 20 dBA. Further controlling overall sound generation, the work top bench is faced with a specially treated surface which is perforated to allow swarf and chippings to be collected in the base of the bench.

Further information: circle 739

Oil overspill container

Following the introduction of vent caps designed to meet the US coast guard anti-pollution regulations, Megator Pumps and Compressors Ltd, London, now offers a moulded alkathene container for use with the caps. It has been developed to meet the increasingly strict regulations preventing oil overspill.

Now vent caps fitted to air pipes from oil tanks must, in the event of overfilling, be capable of directing the overspilling oil into a container. To meet these requirements, Megator extended its range of vent caps by introducing a version incorporating an oil overflow cover designed to direct any overspill of oil downwards to a container. Now, to meet the increasingly strict regulations, Megator has introduced its moulded, stackable oil spill container.

These regulations apply to thousands of ships operating in US waters and, until now, it has been common practice to use oil drums, or other improvised containers, to catch vent cap overspill. Oil drums, however, are badly proportioned for the job and their necks are ill-suited. Several dozen drums also take up a lot of space on board when not in use and, like other metal containers, are inevitably a safety hazard in the presence of flammable vapours.

Further information: circle 740

Hermetically-sealed switches

Normalair-Garrett of Yeovil is marketing a range of switches, designed for reliable operation under adverse environmental conditions.

The switch contacts are magnetically operated and are housed in either a plastic or stainless steel hermetically-sealed encloesure, which provides complete isolation from the surrounding environment. They can be used in explosive or contaminated atmospheres and the range includes special weather-proofed versions and switches for underwater purposes.

Rated at up to 15 amps continuous at 120/480 volts ac and 12 volts dc, the present range provides for single pole switching (single or double break).

The sealed switches can be used in chemical plants, refineries, liquid gas systems, petroleum storage facilities, mining aircraft ground equipment, underwater machinery, offshore drilling rigs and production platforms.

Further information: circle 741

Encapsulating asbestos coatings

A new method of encapsulating asbestos coatings, including sprayed asbestos, in factories and other buildings has been devised by Shell Composite Ltd, of Slough, using their non-flammable Coating 106, an off-white resin-filled emulsion which requires no further decorative or protective treatment. The method of application is said to be simple, requiring no special tools or skills and is especially suitable for encapsulating asbestos used in steel roof structures to form fire breaks. The system is already being used to encapsulate fire breaks above the production area in a car assembly plant.

Water or vacuum equipment is used to thoroughly clean and remove any loose material from the surface. It is then liberally coated with Coating 106, using a brush or spray. A reinforcing membrane of closely-woven glass fibre is immediately embedded in the wet coating and allowed to dry. A further application of Coating 106 is all that is needed to provide a tough, water-proof abrasion-resistant casing which is also fireproof. Coating 106 is applied at a rate of 5-10 litres/10 m^2, is touch dry in 1-3 hours and throughly dry in 12-20 hours. It is supplied in 5 and 25 litre containers.

Further information: circle 742

Digital cassette for low-cost conversions

Operating facilities and read/write reliability comparable with full-scale reel-to-reel tape transports are provided by a range of low-cost digital cassette units introduced by Digital Peripherals Ltd of Painswick. The CS series cassette units are completely autonomous and need no change to a host computer's software. They are plug-compatible with all paper tape punch/read equipment and teletypes and will allow fast, low-cost conversion to cassette-based input/output systems.

Included in the range are read only, write only and read/write versions, all based on a well-proven cassette drive. Twin buffer stores are provided to allow continuous or incremental operation and the units will read or record to ISO 3407 standard at speeds of up to 560 characters per second. Conversion to the Texas Instruments Silent 700 recording standard can be achieved by moving a switch.

Full automatic error correction and control facilities are standard. All units continuously perform read after write comparison and offer two modes of error correction. Overall, error rate is reduced 100 times compared to that offered by conventional paper tape equipment, say the manufacturers.

Further information: circle 743

Super 8 film editing made easier

Acmade International has introduced a new editing machine to meet the increasing world-wide demand by professionals using super 8 film. The Academy 8 incorporates a large clear screen, quiet motorised drive with 'stop-on-a-frame', reversing facilities and hand drive. The unit is compact and completely portable. It is available in two formats: a four-way which allows three sound tracks to be run through with the film, and a three-way which has provision for the picture and two sound tracks. Each track is fitted with a full-width magnetic head which allows either centre or edge track reading.

Further information: circle 744

European community news

Regulations to raise standards in road haulage . . .

Regulations that introduce a test of professional competence for road haulage operators or their managers[1] were laid before parliament by John Horam, Parliamentary Under-Secretary of State for Transport on 8 September. The regulations conform to an EEC directive concerning the occupation of road haulage operator and were made after consultation with both sides of the industry.

The EEC directive 74/561 requires that a road haulage operator should be of good repute, have adequate financial resources for the proper operation of his business and be professionally competent. Evidence of good repute and adequate finance are already taken into account in the granting of an operator's licence and the terms of the directive are met by adding a requirement for proof of professional competence.

The regulations do not affect the validity of current operators' licences nor will they affect the terms under which an operators' licence may be obtained by applicants who wish to carry goods only on their own account (that is for or in connection with any trade or business other than that of road haulage operator). For this reason, after 31 December, operators' licences will be of two kinds; 'restricted' for own account operators and 'standard' for operators wishing to operate for hire or reward (either solely or in addition to own account operations). The latter will be further subdivided into 'national only' and 'international'.

All applicants for 'standard' operators' licences with an effective date on or after 1 January 1978 will have to provide evidence that either the applicant or a full-time manager employed by him is professionally competent (a manager must also meet the requirement to be of good repute). Professional competence can be proved in any one of three ways: by practical experience obtained before 1975; by possession of certain professional qualifications; by passing an examination.

Practical experience

Certificates of professional competence may be obtained by individual holders of operators' licences before 1975 or by those in responsible road transport employment before 1975. These certificates will be valid for national and international standard operators' licences. Responsible road transport employment is defined as 'employment which is employment in the service of a person who carries on a road transport undertaking and is in employment in a position where that individual has responsibility for the operation of goods vehicles used under an operator's licence'. Traffic area offices will be writing to all holders of current operators' licences later this year enclosing application forms for any who wish to claim certificates for themselves or their employees on the grounds of experience before 1975. Application forms for those not currently engaged in road haulage, or whose responsible road employment before 1975 was not with their current employer, will be available on request at traffic area offices. Certificates of competence on experience grounds must be claimed before 31 December 1979.

Professional qualifications

Professional qualifications which will be accepted as proof of professional competence are listed in the regulations.

Passing an examination

Examinations for a certificate of competence will be held by the Royal Society of Arts Examination Board acting on behalf of the government. The examination will be in two parts; the first must be passed to prove competence for either type of standard operator's licence, the second is an additional part for international standard operators' licences only.

A person whose engagement in road transport operations either as a licence holder or in 'responsible road transport employment' began on or after 1 January 1975 but before 1 January 1978 will be regarded as professionally competent until 31 December 1979. This concession will give him until that date to pass the examination and will be valid for both national and international operations. Persons thus temporarily qualified will not be given certificates of competence. Instructions on applications for a standard operator's licence depending on this concession will be issued by traffic area offices.

. . . and the passenger transport industry

Regulations designed to raise standards of professionalism in the road passenger transport industry[2] were also laid before parliament by John Horam on 8 September. The regulations, which give effect to EEC directive 74/562 on admission to the occupation of road passenger transport operator, apply to applications for public service vehicle licences made on and after 1 January 1978.

Two classes of public service vehicle (PSV) licence will be issued – 'restricted' and 'standard'. A restricted licence will be issued on the same terms as those applying for a PSV licence at present and will be required for the operation of a public service vehicle which is outside the scope of the directive. Vehicles in this category are those having not more than nine seats including the driver, or not more than 17 seats when used neither for the business of carrying passengers nor by a person whose main occupation is the provision of road passenger transport services.

A standard licence will be for both international and national operations or for national operations only and will be issued to applicants who are considered to satisfy the requirements of good repute, financial standing and professional competence for operation of a public service vehicle within the scope of the directive. Good repute and finance are already matters to which traffic commissioners have regard in deciding whether to grant a PSV licence, and the terms of the directive will be met by requireing an applicant to make declarations on these matters and to produce proof that he or a transport manager employed by him is professionally competent. A new Certificate of Professional Competence in road transport has been introduced for this purpose.

Persons who held a PSV licence at some time between 31 December 1969 and 1 January 1975 will be regarded as professionally competent on the grounds of experience. So will persons employed in that period in a position of responsibility for the operation of public service vehicles.

Anyone who first held a PSV licence or who entered responsible employment between 31 December 1974 and 1 January 1978 will have to produce further proof of professional competence by 31 December 1979. This may take the form of evidence of at least two years' professional experience in a responsible position, or a recognised qualification from one of the transport professional institutes, or the new Certificate of Professional Competence.

An applicant for a standard licence on and after 1 January 1978 who has not previously held a PSV licence and who is not to be regarded as professionally competent on the grounds of experience in responsible employment must hold a Certificate of Professional Competence or a recognised qualification from one of the professional institutes if he does not employ a transport manager with these qualifications or with the necessary experience.

Details of the arrangements for establishing proof of competence by experience and of the qualifications to be recognised from the professional institutes will be announced soon.

Examinations for the Certificate of Professional Competence will be conducted by the Royal Society of Arts Examination Board and this year will be held on 23 September and 25 November. Details of examining centres are available from the society at Murray Road, Orpington, Kent BR5 3RB.

The syllabus is in two parts, covering national road passenger transport operations and international operations. It has been prepared in consultation with the Department of Education and Science, the road passenger transport industry, the professional institutes and training organisations.

The level of knowledge is intended to be that which could be expected after about 75 hours training in respect of a candidate whose level of education corresponds with the level normally reached at school leaving age. Some candidates may choose to leave out the international studies – which involve 15 hours or so – but this will mean that they can only be professionally qualified for a standard licence to engage in road transport operations restricted to this country. Such a licence may be exchanged for a standard licence for both national and international operations if the international part of the examination is passed at a later date.

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[1] The goods vehicles operators (qualifications) regulations 1977 – SI 1977 no. 1462, HMSO, 35p.

[2] The public service vehicle operators (qualifications) regulations 1977 – SI 1977 no. 1461, HMSO, 35p.

Residential and home study courses are being organised by the Road Transport Industry Training Board and by some colleges of further education. The Royal Society of Arts Examination Board will provide applicants with a list of courses available.

Operators of vehicles exempt from PSV licensing – for example, those used under a permit under the Minibus Act 1977 – are not affected by the regulations.

Rules of competition

The Official Journal of the European Communities L215, 23 August 1977, contains the text of a commission decision dated 25 July 1977 relating to a proceeding under article 85 of the treaty of Rome.

77/543/EEC Stork Roterende Wertuigen BV Netherlands (a wholly owned subsidiary of Koninklijke Machinefabriek Stork BV, Netherlands)/De Laval Turbine International Incorporated, USA (reference DGIV 27.093). The decision concerns the notification to the commission on 2 March 1973, for exemption under article 85(3) of the treaty, of a number of agreements between the above companies relating to the formation of a joint subsidiary – De Laval-Stork VOF.

The activities carried on by De Laval-Stork under the joint venture will consist of manufacture, market research and after sales service (including technical assistance), relating to various types of steam turbines, compressors and pumps.

Know-how and licensing agreements were also concluded between Stork and De Laval-Stork, and between De Laval International and De Laval-Stork. These agreements are royalty-free and exclusive provided that both customers and the place in which the relevant goods are manufactured are within the licensed territory, which includes the community countries, most other Western European countries, the Middle East, and for some products, South Africa.

The commission considers that the joint venture agreement does not substantially restrict competition and, subject to certain conditions and obligations placed on the parties, have decided to grant exemption under article 85(3) of the treaty of Rome for a limited period until 1 September 1986.

Further information: Department of Prices and Consumer Protection, Fair Trading Division, 1 Victoria Street, London SW1 0ET, tel. 01-215 5092.

More community news

Information on European community matters and about member states can often be found in other sections of *Trade and Industry*. For this week's additional news, turn to the following pages:

Overseas trade news

Seminar on German health-care market 504
Market report: south west France 505

Country data

Federal Republic of Germany 514
Luxembourg 514

Statistics

Registrations of British, community and foreign films 526

Advertisements for 'Trade and Industry'

From 19 September, all advertisement inquiries and bookings should be addressed to our Advertisement Department at 13 Great James Street, London WC1, telephone 01-242 9478.

UK trade with the EEC: continued improvement in first half 1977

The United Kingdom's balance of trade with the EEC continued to improve in the first half of 1977. At £876 million, the deficit was at its lowest level since the second half of 1973 (see table 1). The value of exports rose by 17 per cent between the second half of 1976 and the first six months of this year, to £5,704 million, while imports rose by 11 per cent in the same period, to £6,580 million. As a result of these movements, the value of exports represented 86.7 per cent of the value of imports in the first half of this year, the highest figure since the second half of 1971.

The improvement in our trade balance with the EEC has been one component of a reduction of £469 million in the UK's overall visible balance between the second half of 1976 and the first half of 1977 (see table 2). The most marked change in trade by area in this period was the swing from deficit to surplus in trade with the oil exporting countries. This sharp movement reflected both a continued increase in exports to these countries and also a reduced value of imports as North Sea oil has become progressively available. In contrast to these improvements, the balances of trade with the rest of western Europe (which included substantial imports

Table 1 UK balance of trade with the EEC

£ million, balance of payments basis, seasonally adjusted — Percentage change on previous period

	Exports fob	Imports fob	Visible balance	Exports as a proportion of imports %
1970	2 348 (+17)	2 304 (+11)	+44	101.9
1971	2 512 (+7)	2 697 (+17)	−185	93.1
1972	2 836 (+13)	3 421 (+27)	−585	82.9
1973	3 943 (+39)	5 124 (+50)	−1 181	77.0
1974	5 581 (+42)	7 608 (+48)	−2 027	73.4
1975	6 273 (+12)	8 676 (+14)	−2 403	72.3
1976	9 025 (+44)	11 129 (+28)	−2 104	81.1
1975				
1st half	2 927 (+1)	4 092 (+1)	−1 165	71.5
2nd	3 346 (+14)	4 584 (+12)	−1 238	73.0
1976				
1st half	4 149 (+24)	5 188 (+13)	−1 039	80.0
2nd	4 876 (+18)	5 941 (+15)	−1 065	82.1
1977				
1st half	5 704 (+17)	6 580 (+11)	−876	86.7

Table 2 UK balance of trade by area

£ million, balance of payments basis, seasonally adjusted

	EEC	Rest of western Europe	North America	Other developed countries	Oil exporting countries	Rest of World	Total
1970	+44	+179	−484	+149	−113	+200	−25
1971	−185	+118	−171	+223	−188	+483	+280
1972	−585	−37	−79	−154	−131	+284	−702
1973	−1 181	−277	−278	−205	−329	−83	−2 353
1974	−2 027	−351	−696	+101	−2 217	−4	−5 194
1975	−2 403	−55	−659	−14	−701	+629	−3 203
1976	−2 104	−4	−817	+10	−699	+43	−3 571
1975							
1st half	−1 165	+29	−351	+18	−389	+283	−1 610
2nd	−1 238	−84	−308	−32	−312	+346	−1 602
1976							
1st half	−1 039	+32	−309	+121	−293	+60	−1 445
2nd	−1 065	−36	−508	−111	−406	−17	−2 126
1977							
1st half	−876	−41	−526	−205	+223	−241	−1 657

of North Sea oil and gas production installations) and north America were little changed in the first six months of this year. The deficit with the other developed group of countries worsened in this period, as did the balance with the rest of the world.

Table 3 Crude trade balance with the EEC by commodity

£ million, not seasonally adjusted (OTS basis)

				1976		1977
SITC(R)	1974	1975	1976	1st half	2nd half	1st half
0 Food	−1 220	−1 470	−1 423	−705	−718	−807
1 Beverages and tobacco	−86	−66	−73	−26	−47	−31
2 Basic materials	+10	+28	−12	+6	−18	−9
3 Fuels	−251	−313	−223	−197	−26	+39
4 Vegetable oils	−32	−30	−30	−15	−15	−19
5 Chemicals	−106	−6	−76	−23	−53	−65
6 Other semi-manufactures	−142	−184	+109	+46	+63	+147
7 Machinery and transport equipment	−262	−228	−399	−147	−252	−217
8 Other manufactures	−127	−127	−88	−45	−43	−50
9 Other goods	+20	+27	−3	0	−3	+5
Total not seasonally adjusted	−2 196	−2 369	−2 217	−1 105	−1 112	−1 008
Total seasonally adjusted	−2 196	−2 369	−2 217	−1 117	−1 100	−1 032
Crude balance in some of the major commodities						
Meat	−329	−310	−336	−130	−206	−208
Dairy produce	−259	−412	−324	−169	−155	−134
Cereals	−284	−262	−360	−198	−162	−192
Fruit and vegetables	−129	−171	−210	−114	−96	−134
Sugar	−68	−152	−58	−35	−23	−48
Crude oil	−175	−215	−197	−155	−42	+125
Petroleum products	−24	−76	+48	−5	+53	−64
Plastics	−143	−62	−132	−55	−77	−73
Iron and steel	−293	−312	−315	−163	−152	−125
Precious stones	+184	+146	+289	+146	+143	+181
Machinery	−202	−190	−278	−145	−133	−83
Road motor vehicles	−94	−96	−238	−61	−177	−222

Trade by commodity

Table 3 analyses our trade with the EEC by broad commodity group. A commodity breakdown of exports and imports is not available on a balance of payments basis, but the commodities contributing to the movements in the overall deficit can be seen from the 'crude' balance of trade, ie the difference between exports fob and imports cif – although this is not a good measure of the balance of trade in goods because, inter alia, of differences in valuation. A further difficulty arises with non-calendar year data in that the commodity detail is not available seasonally adjusted, and thus some movements in the crude balance between, for example, half years may reflect only normal seasonal fluctuations. For this reason the figures in the table must be used with caution.

The main changes between the second half of 1976 and the first half of 1977 have been an increased crude deficit on trade in food and live animals, more than offset by improvements in the balances on fuels, the 'other semi-manufactures' group (ie SITC section 6) and machinery and transport equipment. These developments are described in more detail below.

Non-manufactures

The United Kingdom's crude trade deficit in food and live animals with the rest of the EEC in the first half of 1977 was around £100 million greater than in either the first or second halves of 1976. A small improvement in the balance on dairy products between the two latest half years was more than offset by higher levels of deficit in cereals, fruit and vegetables, and sugar.

The reduction in the deficit on dairy products was a reflection of lower imports of both butter and cheese resulting from higher UK prices reducing demand coupled with a high level of existing stocks.

The balance on cereals worsened by £30 million in the first half of the year, but was at a slightly lower level than in the first six months of 1976. Imports of wheat, which had been low in the second half of 1976, rose back to near their year-earlier level (largely a seasonal movement) while barley imports were high partly as a result of the UK drought. In contrast arrivals of maize from the community fell back in the first half of 1977 to a level (by weight) of around three-fifths that in each half of 1976. Since total UK imports of maize from all sources rose in the first half of this year, the reduction reflects a lower level of transhipment through the community.

Part of the rise in the crude deficit on fruit and vegetables reflected higher imports, both in price and volume, of apples, due to the poor UK crop which too resulted from the drought. There was also a rise in arrivals of tomatoes and cabbages.

Recent movements in the balance of trade in sugar have tended to reflect fluctuations in imports of raw sugar from the community which are often erratic. These imports fell to a low level in the second half of 1976, while in the first half of 1977, they were greater, both in value and volume, than in the whole of last year.

Changes in the balance of trade in fuels with the EEC almost entirely reflects movements in trade in petroleum and petroleum products, which makes up over 95 per cent of the total. With the rise in North Sea oil production, there has been a very marked shift in the balance of trade in crude oil with the EEC. This has been mainly due to a rapid and substantial rise in crude oil exports. These exports were valued at £248 million in the first half of 1977, compared with £67 million in the preceding six months, and £29 million in the first half of 1976.

Partly offsetting the improvement in crude oil trade there has been a deterioration in trade in petroleum products in the latest half-year. This has mainly reflected a swing in trade in fuel oils (eg for heating). This type of trade may well vary quite considerably over short periods. In the second half of 1976 exports of fuel oil were high while imports were low, probably as a result of increased export demand resulting from unusually cold winter weather abroad. In the first half of this year the position has been reversed, both because UK demand was, as normal, higher than in the second half of last year and because there have been increased net exports to non-EEC countries – Sweden and the USA in particular.

Manufactured goods

There was little change in the crude balance of trade in chemicals between the latest half-years.

Within 'other semi-manufactures' the increase in the crude trade surplus was predominantly due to improvements in the balance for iron and steel and precious stones.

The value of imports of iron and steel from the rest of the EEC was little changed between the second half of 1976 and the first half of 1977, while exports increased by 19 per cent in the same period. These movements probably reflect the easing of production constraints in the domestic steel industry, coupled with an export drive fuelled by the competitive edge given by the depreciation of sterling last year.

The United Kingdom's substantial surplus in trade with the EEC in precious stones continued in the first half of this year. Almost nine-tenths of exports went to Belgium/Luxembourg in this period.

The crude trade deficit with the rest of the EEC in machinery was £50 million lower in the first half of 1977 than in the second half of last year. This improvement was widespread among the various machinery items. Exports of machinery rose by 19 per cent over this period, while the value of imports was 13 per cent higher.

There was a marked increase in the UK's crude trade deficit in road motor vehicles with the rest of the EEC in both the second half of last year and the first half of 1977. This reflected increases in imports of passenger cars, from 166 000 cars in the first half of 1976, to 196 000 cars in the second half-year, and to 241 000 cars in the first half of 1977. Part of this will have reflected the increasing tendency on the part of the multinational car companies to build some models overseas and import them into the UK.

Inquiries: 01-215 3155.

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TRI 1

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Overseas trade news

Roy Kinnear plots to boost UK exports

Roy Kinnear, square footballs, a desert island and the inevitable beautiful girls are part of a plot to help British exports.

The plot is the plot of 'Sink or swim' a film produced jointly by the British Overseas Trade Board and Emitel, a division of EMI as a contribution to Export Year.

The première of the film took place on 12 September in the presence of the Duke of Kent and Sir John Read, chairman of EMI and a member of the BOTB.

Introducing the film Sir John said Export Year and Roy Kinnear might seem odd bedfellows but he hoped that the film would show to audiences throughout the land how important their contribution was to the UK's export business.

Roy and a mate are marooned on a desert island and set up a thriving trade in square footballs with a nearby island. In the process, they discover something about exporting – as well as enjoying some of the luxuries of life, including the company of Dana Gillespie who also stars in the film.

Copies of the film are available for hire from EMI Films, 142 Wardour Street, London W1V 4AB, tel. 01-437 0444.

'If they want square footballs, then square footballs they can have.' Ben (Roy Kinnear, second right) gets a lesson in exporting from John (Chris Langham) in a scene from the Export Year film 'Sink or Swim'.

Cholera outbreaks: businessmen warned

An outbreak of cholera has been reported in Tarawa, Gilbert Islands. Visitors should ensure that they are vaccinated against cholera before travelling to this territory.

In addition the Department of Health and Social Security has reminded travellers to the Middle East to seek vaccination against cholera and to take care over food and drink. This follows reports of recent cases of cholera from four countries in that region.

Syria and Israel have notified the World Health Organisation of cases of cholera, and it is understood that an outbreak has been officially announced in Jordan. The one case reported by Israel has occurred in Nablus. Cholera organisms have been recently isolated from two persons coming to the United Kingdom – one from Iraq and one from Turkey.

Vaccination against cholera is advised for persons travelling to these countries and also to neighbouring territories as the disease seems likely to spread more widely in the region.

Those returning to the UK from the Middle East are advised to report to their doctor if they suffer from diarrhoea or abdominal upset within five days of leaving the area.

Letters to the Editor

Letters to the Editor should be addressed to the Editor, *Trade and Industry*, Room 437, 1 Victoria Street, London SW1H 0ET, and *not* to HMSO.

Central African Empire coronation

Businessmen are warned that visits to the Central African Empire should be avoided in the period around 4 December 1977. Emperor Bokassa I is to be crowned, and all hotels are likely to be full.

Gulf conference on marine technology

Bahrain will be the venue for an international conference on marine technology and the Gulf in November.

This conference is promoted jointly by the Bahrain Society of Engineers and the UK Institute of Marine Engineers and will take place at the Bahrain Municipality Conference Hall from 5 to 8 November.

The patron of the conference will be Sheikh Hamed Ein Esa Al Khalifa, the heir apparent and Minister of Defence.

The conference will probably consist of 13 sessions, each session having two speakers who will be allocated half an hour of speaking time, plus 10 minutes for discussion.

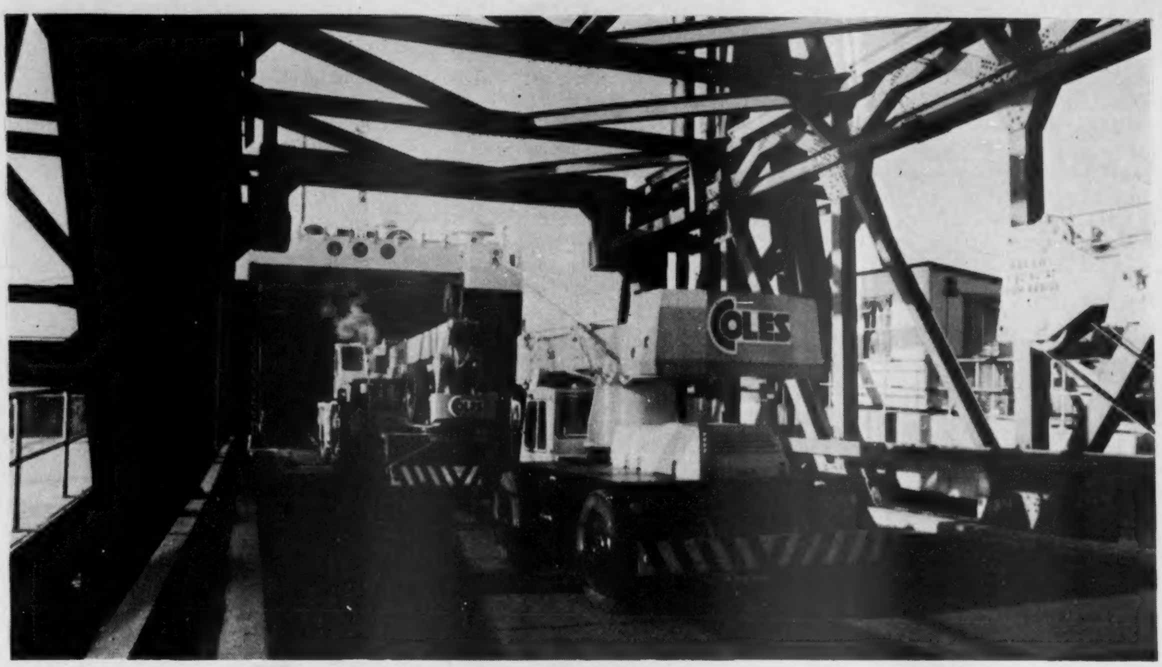
Gulf contributors will include government ministers and under-secretaries from Bahrain, Saudi Arabia and Kuwait as well as executives from Gulf-based shipping companies and academic contributions from the University of Kuwait.

Further information can be obtained from the Institute of Marine Engineers, 76 Mark Lane, London EC3R 7SN, tel. 01-481 8493.

Invitations open for Poznan fair

As in previous years the Department of Trade will be organising a British pavilion at the above exhibition in 1978. The Poznan fair is the largest annual event to be held in eastern Europe and is the focal point each year at which representatives from Polish industry meet suppliers from abroad. The fair therefore provides a useful method of making and maintaining contacts within the Polish buying organisations.

It was for these reasons that the British Overseas Trade Board decided, in 1976, to finance the construction of a new pavilion



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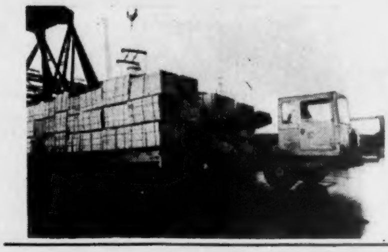

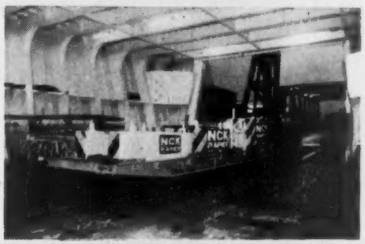

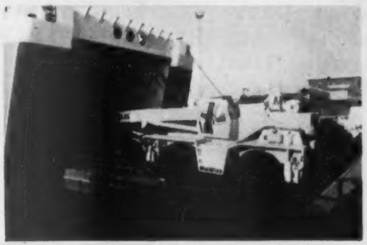

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for the use of the British group at the fair, and this building housed the British participation for the first time in 1977. This enabled the interests of over 270 manufacturers to be represented on 100 separate stands.

It is expected that the demand for space at the event in 1978 will again be extremely high, and the final date for the return of applications is 28 October 1977. Further details and application forms are available from M. J. Dempsey, Fairs and Promotions Branch, Hillgate House, 26 Old Bailey, London EC4, tel. 01-248 5757 ext. 7246.

Seminar on German health-care market

A one-day seminar on the West German market for health-care equipment and supplies is being staged by the British Health-Care Export Council in conjunction with the British Overseas Trade Board on 11 October in London.

The seminar, which will be held at the King's Fund Hospital Centre, 126 Albert Street London NW1 will cover a large number of topics including:

Review of the size and scope of the West German market and the UK image in Germany.

Outline of the health services in Germany.

The attitudes, preferences and expectations of German doctors about quality and cost of equipment and products, particularly if it is not made in Germany.

German methods of distribution, sales and service, both federal and regional for technological equipment and for consumables and instruments.

German regulations, restrictions and standards.

How good is the UK sales technique in Germany.

How can UK firms improve/launch their sales in Germany.

The speakers from Germany include: Professor Hans Haug, Head of the Medical Laboratory at the Katharinenhospital in Stuttgart; George Scholz, managing director of Ima Gmbh, Giessen; W. Seidler, commercial department, British consulate-general, Stuttgart; and K. Widensohler, president of Medimex, Hamburg.

Further details can be obtained from: Mr J. L. M. Hole, British Health-Care Export Council, 22 Newman Street, London W1P 3HP, tel. 01-580 7912/5.

Lord Mayor's award for marketing

In the coming months students, colleges and local companies, will be able to enter for the Lord Mayor of London's marketing awards for student enterprise. The aim of the competition is to stimulate enterprise and initiative among marketing students by asking them to present a marketing plan for a selected product or service, preferably working with a local company.

The award scheme, which originated during the term of office of Lord Mais, is jointly administered by the Institutes of Export and Marketing and funded by grants and covenants from the British Overseas Trade Board, the Corporation of the City of London, the London chamber of commerce and many leading British companies.

All universities, polytechnics and colleges of further education that provide marketing education or business studies with a special interest in marketing can enter and there are three cash awards of £750, £500 and £250, divided equally between the winning students and their colleges.

Students studying for the Institute of Marketing certificate and diploma in marketing can also enter. Application for entry forms should be sent to the Institute of Marketing, Moor Hall, Cookham, Berkshire before 31 December.

Adjudication will take place in February 1978 and prizes presented at a special luncheon to be held in the City of London on 14 March 1978.

Security export controls

A consolidated list of goods subject to security export control is published from time to time in *Trade and Industry.* This was last published in the issue of 30 April 1976, page 301 with a subsequent amendment on 5 November 1976, page 372.

Exporters are reminded that UK export licences are necessary for goods on this list sold to most countries abroad. The implications of the security export controls, however, arise principally in relation to exports to communist countries. While licences should usually be available for other destinations, exporters are reminded that the issue of licences for communist countries in particular cannot be taken for granted. Approval by the government of applications to export to the communist countries often involves reference to the International Committee and unless this committee reaches a unanimous decision it is not possible to issue export licences.

The international controls apply equally to the technology related to the goods which are subject to security export control. Exporters are therefore reminded that any negotiation which includes the transfer of technology involved in the manufacture of any item contained in the list of goods subject to security export control poses greater problems in securing the necessary international approval than negotiations for the export of hardware alone.

Full details of any proposed export, in terms of both the specification of the items to be exported and the proposed end use and end user, are required by the government to assist its consideration of cases and in order to obtain any necessary international clearances. Exporters are therefore reminded that it will help to avoid delays if they provide the fullest possible details when they first approach the government for advice or approval. Failure to provide full information inevitably results in protracted correspondence in order to obtain replies to technical questions.

Finally, the attention of exporters is again drawn to the notice on export of goods of US origin published in *Trade and Industry*, 16 January 1976, page 166 which concerns the need for US re-export licences for goods and materials of US origin.

The UK government wishes to encourage exports but companies wishing to export to communist countries goods and technologies which are subject to security export controls need to bear in mind that approval to export cannot be guaranteed. Exporters are therefore reminded that in any negotiations with potential purchasers in communist countries prior to the issue of a UK export licence any negotiating or contract document which is signed between the supplier and the purchaser should contain a provision to the effect that the contract – or intended export – is subject to government approval.

Any inquiries about this notice should be addressed to the Department of Trade, CRE4/1d, tel. 01-212 6670 or 01-212 6792.

Notices to importers

Issued by the Department of Trade, Import Licensing Branch, Charles House, 375 Kensington High Street, London W14 8QH. telephone inquiries should be addressed to the number at the end of the notice.

1634: Imports of bananas from the dollar area

To offset expected shortfalls in supplies of fresh bananas to the UK from other sources, a further supplementary quota of 1800 tonnes has been established for imports from the dollar area.

In order to ensure continuity of imports, the supplementary quota will be allocated between existing licence holders, having regard to the use they have made of their allocations under the current quotas for 1976-77.

Import licences will be issued to importers against their allocations only for those amounts for which they can produce evidence of a firm contract with the overseas supplier.

Licences issued under these arrangements will be valid only until 30 September 1977. The dollar area as defined in the open general import licence means Bolivia, Canada, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Liberia, Mexico, Nicaragua, Panama, Philippines, United States of America and Venezuela.

Inquiries: Import Licensing Branch, tel. 01-603 4644, ext. 237.

EXPORT YEAR NEWS
7

Export Year is sponsored by:
The Association of British Chambers of Commerce
The British Overseas Trade Board and its Advisory Council
The Committee on Invisible Exports
The Confederation of British Industry
The Institute of Export
The Trades Union Congress

Roy Kinnear stars in Export Year film

"If the customer wants square footballs, then square footballs he shall have." That is the message Roy Kinnear learns in a new film called "Sink or Swim" produced for Export Year by EMITEL, a division of EMI, in association with the BOTB.

Marooned on an island without fruit, Roy and his more active workmate John (Chris Langham), are faced with the distinct prospect of "snuffing it" from scurvy. But nearby islanders' insatiable demand for square footballs enables the two to survive, and enjoy some of the luxuries of life – including Dana Gillespie – as well as the necessities. In the process, they discover the need for, and the potential of, exports.

"Sink or Swim" was shot on location in Chiswick and Lanzarote, and directed by John Michael Phillips, who made the highly praised TV series "Get Out and Push".

Roy Kinnear (left) and Chris Langham in a scene from "Sink or Swim"

The film was made to illustrate the fact that, "We need more exports in the same way as any football team needs more goals" (Jack Jones). It is intended to be shown by companies to their staff, and will also be of interest to export clubs and chambers of commerce. It lasts 28 minutes, and copies are available for hire from EMI Films Ltd, 142 Wardour St, London W1V 4AE. Tel: 01-437 0444.

Local activities sustain interest

The momentum created by Export Year is being maintained by activities arranged by local committees, supported by a nationwide series of visits by Roy Earnshaw, the Export Year adviser. The Sheffield-based Export Year committee, for example, is looking for the company judged to have made the most significant contribution to the campaign in South Yorkshire. The winning company will receive a plaque donated by Viners, and an employee will go on a British Airways holiday to a place in the sun.

The Luton committee has formed a group, "Export Breakthrough", to offer help to companies not yet exporting, and the Thames Valley committee is planning a follow-up to its highly successful seminar, "A Plain Man's Guide to Exporting".

In Manchester, the Lord Mayor, backed by John Graham, president of the Manchester Chamber of Commerce, and the local committee, arranged a reception for 60 companies.

They also serve who pack and freight

"It profiteth the country little if the manufacturers produce the goods, but they never get overseas, or they arrive in a shambles," said the Lord Mayor of London, Cdr. Sir Robin Gillett, presenting the Queen's Award for Export Achievement to freight forwarding company Thomas Meadows & Co. Ltd.

Under the enthusiastic direction of its chief executive Jim Featherstone, who is also a member of an NEDC committee for international freight movement, and national chairman of the Institute of Freight Forwarders, the company has been taking an active part in Export Year.

Its 1400 staff, who work in more than 30 offices and depots throughout the country, are reminded every day of their contribution to exports by the very nature of their work. But to make sure they don't forget, the company's magazine *Manifest* has carried stories about Export Year.

For companies unfamiliar with exports, Meadows has produced an introductory booklet called *Export Year.* The firm is also offering one free copy of its attractive book *Understanding the Freight Business* to every firm registered with the Export Year Office.

Explaining his company's support for Export Year, Jim Featherstone told *Export Year News:* "I want to ensure that both management and shop floor fully appreciate the critical importance of reliable and efficient distribution, on which so much of the servicing reputation of the exporter depends. It is vital that distribution is given the respect and standing it warrants."

The Lord Mayor of London (left) presents the Queen's Award to the chief executive of Thomas Meadows & Co.

Queen's Awards

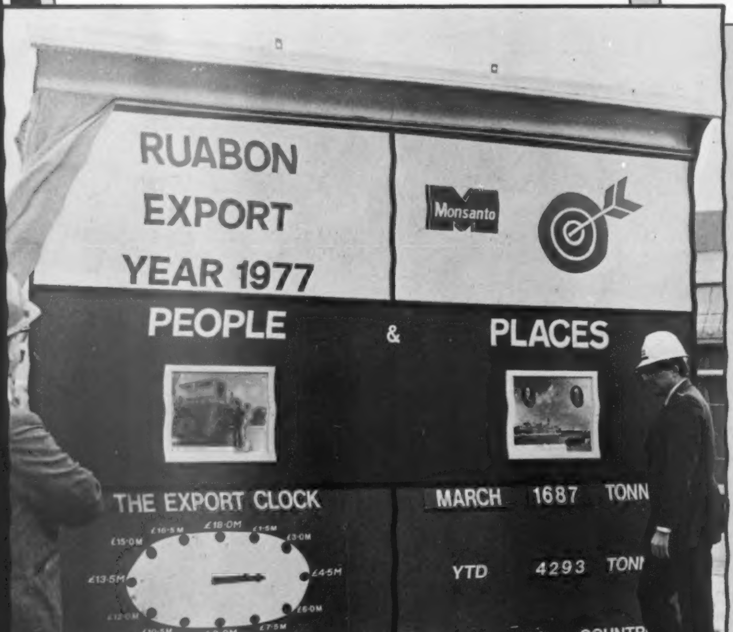
Applications are invited from companies who wish to be considered for the 1978 Queen's Awards for Export and Technology. The closing date is 31 October. Forms and further details are available from the Queen's Award Office, 11-13 Holborn Viaduct, London EC1A 1EL, tel. 01-222 2277.

NOTICE BOARD
Pin this on your company notice board

The greatest show on Earth

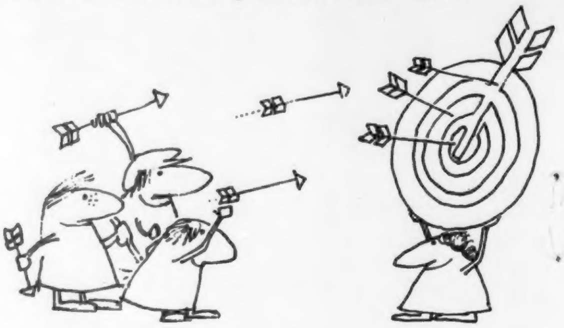
Believed to be the largest Export Year display in the country, this 12-foot-high reminder of Export Year stands outside the Ruabon Works of Monsanto Ltd for everyone to see.

The display is changed every month, and, as well as featuring some of the company's 90 overseas markets, highlights individuals who are playing their part in some stage of the manufacture of the company's chemical products. The company is also handing out attractive beer mats and car stickers featuring Export Year.



"Highlighting the industries"– Sir Francis Sand

"I am pleased to hear that many companies are taking part in Export Year with considerable success and much enthusiasm among their workforce.



"Many of the employees of companies in the invisibles sector – banks, insurance companies, freight forwarders, airlines, hotels and other organisations – are dealing every day with foreign trade, so need little reminding of their contribution to the UK's balance of payments – a very substantial contribution, with total invisible earnings last year at nearly £13 000M.

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Firm's efforts win MP's applau

Packers at Nottingham-based P. P. Payne, manufacturer of strapping, garment labels and ribbons, support the Export Year message. May Charles and Eric Parks, pictured here, are among the firm's 500 employees aiming to export 25 per cent. of production in the next 12 months.

Payne's Export Year campaign is being backed enthusiastically by the company's local MP, William Whitelock. "I applaud your efforts to involve the families of your employees in the progress of the company, and I hope you will be successful," he wrote to managing director Nigel Reynolds.

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"What I would like to see achieved during Export Year is a greater awareness among employees of manufacturing companies of how dependent a firm's success is on invisible services.

"A sale of electronic equipment to Japan, or water pumps to Saudi Arabia, cannot be completed without insurance, banking, freighting and many other such services.

"Of course the sale of manufactured goods overseas – especially of the unusual, like the much-publicised prayer mats to Mecca and refrigerators to Iceland – catches the imagination of everyone. But I hope that Export Year will help to highlight as well the important contribution made by the service industries. This is a contribution not only of very substantial direct earnings from overseas, but also in providing facilities without which no UK manufacturer could sell anything overseas."

—Sir Francis Sandilands,
Chairman of the Committee on Invisible Exports

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Selling with confidence

The impact of Export Year is being felt as far away as Australia. More than 50 companies, many of them taking part in the campaign, were represented at the Melbourne International Engineering Exhibition.

Commented Bert Harmer, chairman of Hallite Holdings, one of the British companies at the exhibition: "Thanks to the stimulus of Export Year, we have been able to sell with great confidence in Australia, knowing that our workforce at home are backing us all the way."

Bert Harmer is seen, left, showing a hydraulic sealing product to an interested Australian visitor.

Bull's-eye girls

Pretty, and very determined members of Balfour Beatty Engineering's five-a-side football team donned Export Year tee-shirts for their sports day at Sidcup in Kent.

Send details of your company or organisation's Export Year activities to the Press Officer, Export Year Office, British Overseas Trade Board, 1 Victoria Street, London SW1H 0ET. tel: 01-215 5773.

EXPORT YEAR NEWS

"Export Year is something that has really worked. It has got down to the shop floor. It has demonstrated that people will clearly understand the simple message that we have got to increase our exports if we are going to maintain our national standard of living. I think it is going to have an on-going impact far beyond the end of any individual company's campaign."

—Lord Limerick, immediate past president of the Association of British Chambers of Commerce

Export Year Patrons:
HRH The Duke of Kent
The Rt Hon Edmund Dell MP
Jack Jones
Lord Limerick
Lord Luke
Sir Francis Sandilands
Lord Watkinson

Export Year News,
Editor: Peter Beckingham,
Export Year Office,
British Overseas Trade Board
1 Victoria Street,
London SW1H 0ET
Tel: 01-215 5773

Putting mustard into Export Year with Fiery Fred

Freddie Trueman, ex-Yorkshire and England fast bowler, has been helping Reckitt and Colman have a lively Export Year. "Fiery Fred" is the commentator of the company's audio-visual presentation, produced specially for Export Year.

The 8000 employees of Reckitt and Colman, manufacturer of products such as Harpic, Dettol, and Robinson's soft drinks, will all be having time off work to see the 20-minute presentation, which explains how the company exported over £27M-worth of products to 120 countries last year.

Every two months, the staff are given copies of their company's own *Export Year News*, styled on the national publication.

The company's activities are already having effect, as Dick Sommers, director of planning of the Overseas Division, told *Export Year News:* "We are delighted with Export Year, and the impact it is having right through the company. It's a good idea, and has been completely worth supporting."

A cartoon from Reckitt and Colman's audio-visual presentation

"Export Year a success"–CBI

"Communication is a vital ingredient in teamwork, exporting relies on good teamwork and Export Year aims to provide the communication," said Lord Watkinson, CBI President, in a mid-term message issued by the CBI.

"Export Year has been a success and this means that the 2400 companies participating in the scheme have developed plans to give every employee a better understanding of the vital importance of export sales and their part in achieving these," he continued.

"Since Export Year was launched in June last year, international competition has intensified. This is mainly due to two factors. World trade has not grown as rapidly as had been expected. The industrialised countries with whom Britain has to compete all have the same problems of unemployment and idle productive capacity. Even more important, the rates of inflation of our major competitors remain at least half of Britain's. With stronger currencies than sterling they are thus able to import their raw materials at lower cost than we can whilst lower inflation rates make their whole economy more competitive.

"All this means that we cannot expect price alone to win our business. Our products must beat the competition all along the line: in design, quality, reliability, delivery and service. This is a tall order but if every single one of us involved in industry gives of our best the chances of success are brighter. With success will come more jobs and the higher standard of living that we seek."

Small is beautiful

Many of the country's smaller companies are taking an active part in Export Year. For example, over a third of the 220 staff at Laing National, Manchester — manufacturer of speciality starches — have in their own time attended meetings arranged by the company's export manager to explain how its products are used in overseas and domestic factories.

The 300 employees of Thomas Shepherd Carpets, Dundee, which donated the carpets for London's Jubilee buses, stopped work at the company's expense to hear about their firm's plans for Export Year. The company is aiming to double overseas sales this year, to a figure of over £½M.

Rectella International, Chorley, manufacturer of curtains, bedspreads, wallcoverings and plastics, is putting up at its factories framed copies of the Queen's letter to Sir Frederick Catherwood about Export Year, for all its 230 staff to see. The company started exporting only three years ago, and this year anticipates overseas sales of £2½M.

The 470 staff of Lee Howl and Co., Tipton, who this year hope to sell £1M worth of pumps to Saudi Arabia alone, are receiving a regular Export Year bulletin produced by the company's sales director.

Exports have gone up from 7 to 20 per cent. of turnover because of the impetus of Export Year, says the director of Titanium Metal and Alloys, George Laybourne-Smith. The firm's 17 staff have placed a special emphasis on export orders as a result of taking part in Export Year.

The 100 employees of Spur Systems International, Watford, were each presented with a bottle of champagne to celebrate reaching £1M-worth of exports two months ahead of target. "If we hadn't got the production right we wouldn't have got the extra business," the staff were told by managing director Sydney Wynn-Simmonds.

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MARKET REPORT: SOUTH-WEST FRANCE

Where a visit could mean business

In this, the third in our series of regional market reports on France, we move from the more industrialised areas of the north-east[1] to the agriculture-dominated south-west. Robert Ford, consul-general in Bordeaux, describes the commercial opportunities in a region where the medium-term prospects for industrial development look good.

Our links with south-west France go back over 700 years to the Plantagenet kings. They remain close today with active academic, student and cultural exchanges creating for us a favourable business climate. It is popular too with the many British holiday-makers passing through on their way to Spain or staying in the Dordogne or at one of the many Atlantic resorts. Few British businessmen, however, come to the region.

The Bordeaux consular district covers an area about the size of England made up of four regions (see map, page 506) which themselves comprise 18 départements. With a land area one quarter that of France, the south-west's 7 million inhabitants comprise 13 per cent of the total population and, although all the regions are largely agricultural, there is great diversity between them, particularly between north and south.

An agricultural area

Although 28 per cent of the total workforce of south-west France is engaged in agriculture, modernisation of farming methods has, in recent years, seen a movement away from the land to new industries established in industrial zones around the main towns. Nonetheless the area remains predominantly agricultural, with products ranging from cattle and cereals in the north to fruit, vines and market gardening in the central and southern areas and timber along the southern Atlantic coast.

Viticulture is the most important economic activity of the region – the products of the Cognac and Bordeaux areas are household names. Despite the dominance of these two giants, viticulture is also important in smaller areas of the south and east. Armagnac from the Condom region, for example, is becoming increasingly popular outside France.

Both Bordeaux and Cognac have suffered reverses in recent years. Speculation and the Bordeaux wine affair of 1973 affected confidence and hit the wine trade badly. The trade is, however, now recovering with an excellent 1975 vintage followed by a generally good one in 1976. An increase in the price of its rivals in Burgundy and the Côtes du Rhône has again made Bordeaux competitive in both domestic and world markets. In 1976 world exports of Bordeaux wines were worth Fr 700 million[2], and Fr 94 million (13.4 per cent) worth of this total was exported to the UK.

Overcoming difficulties

Cognac's difficulties arose from a combination of over-planting and depression in its more important overseas markets (caused mainly by external factors). But, like Bordeaux, Cognac is overcoming its difficulties and last year showed a sales increase of 23 per cent to leading overseas markets. This brought sales in 1976 back almost to the pre-slump position. Total exports in 1976 were valued at Fr 2,000 million, of which Fr 252 million (12.6 per cent) went to the UK.

For a region as heavily dependent upon agriculture as the south-west, the last 12 months or so have not been kind; the two northern regions suffered badly from the 1976 summer drought; storms at the close of the year destroyed about 1 million m^3 of timber in the Landes (one year's supply); severe springtime frosts destroyed 40 per cent to 50 per cent of the Bordeaux and Cognac grapes; and in July damage amounting to some £15 million was caused by extensive flooding in the fruit and market gardening regions of Lot-et-Garonne, Tarn-et-Garonne and Gers. Extensive government aid has been given to the stricken areas.

Industry

The traditional industries of south-west France – textiles, leather, shoes and clothing – carried out in numerous small factories remain of local economic importance but are becoming increasingly uncompetitive in world markets and are slowly declining. Limoges is the exception, where porcelain production is increasing.

Modest industrialisation of the south-west – the workforce engaged in industry is only 2.7 per cent of the total French industrial workforce – has taken place during the last two decades. Factories are small by British standards and are either traditional or have been attracted to the various towns of the region by government incentives. In the two leading industrial centres there are only 30 firms, which employ over 500 personnel. Outside of these two centres there is less than a score of firms employing this figure.

The main industrial centres are Bordeaux

Under construction at the Toulouse factory of Dassault-Breguet, the Anglo-French Jaguar aircraft.

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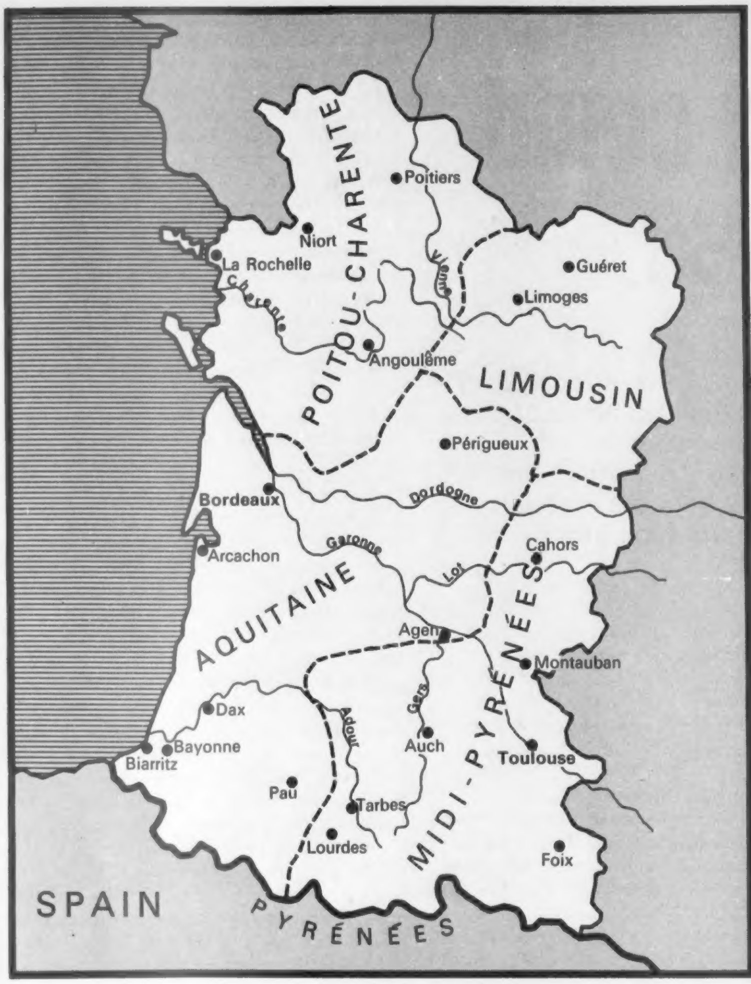
[1] See 15 July and 19 August issues of *Trade and Industry*.

[2] Current rate of exchange: Fr 8.45 = £1 approximately.

Bordeaux consular district:

the agriculture-dominated south-west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Foix
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Arras
Haute-Normandie
Picardie
Basse-Normandie
Bretagne
Paris Region
Champagne Ardennes
Lorraine
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Centre
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Franche-Comte
Poitou-Charentes
Limousin
Auvergne
Rhône-Alpes
Aquitaine
Midi-Pyrenees
Provence-Cote D'Azur
Languedoc-Roussillon
Corse

and Toulouse, whose leading industries are aerospace, electronics, pharmaceuticals, chemicals and automotive parts (Ford). Hovercraft are built by Sedam near Bordeaux. A nuclear power station is under construction on the northern bank of the Gironde. Other centres are Limoges, electrical products; Angoulême, paper and electric motors (Leroy-Somer); Poitiers, metallurgy and light industries; La Rochelle, ship repairs/building; Pau and Tarbes, chemicals and aeronautical products.

Unemployment

Unemployment stands at 5.5 per cent as opposed to 4.5 per cent for France as a whole. Some areas, however, do suffer from much higher unemployment. This is due to the nature and location of industry in the south-west; many towns depend heavily on a few local factories, the closure of which greatly affects the local economy. It is for this reason that official policy prefers investment directed into small and medium-sized firms (20 to 50 employees) rather than into larger units. Despite the high unemployment figure there is a shortage of skilled labour.

Aeronautics industry

As far as Anglo-French trade is concerned the aeronautics industry is the most important single activity in the region. The two leading French aircraft builders, Aérospatiale (SNIA) and Dassault-Breguet, have plants in the south-west. At Toulouse, Aérospatiale is engaged in the construction of Concorde, Airbus and helicopters and Dassault-Breguet builds the Anglo-French Jaguar and the Franco-German Alpha Jet. In the Bordeaux area Dassault-Breguet builds the Mirage, Falcon and Mystère military aircraft and has established repair, maintenance and research facilities, while at its Biarritz plant, the firm manufactures a wide range of spare parts.

Ancillary aeronautics industries are also active in the area. Engines, landing gear, propellers and air-conditioning and electrical equipment are manufactured by main subcontractors situated mainly in the Toulouse and Pau area. Other work is sub-contracted out, often to relatively small but specialised companies, some of it going to UK firms.

Tourism

Tourism is the south-west's biggest growth industry. While the traditional centres in the Dordogne and Biarritz remain popular, recent years have seen a rapid increase in numbers visiting the many small resorts along the Atlantic coast. Although some new hotels have been built, accommodation at these resorts is provided mainly by good quality camping and caravan sites.

In 1976 an estimated 3.2 million tourists visited the southern coast line, while the popularity of the Pyrenees for winter-sports is on the increase.

Communications

There are good air links within the region and Toulouse and Biarritz have regular flights to London. In addition to a daily London service, Bordeaux has flights to Spain, Portugal, Greece (seasonal) and some francophone countries in north and west Africa. Both Bordeaux and Toulouse have good air-cargo handling facilities. But, whereas rail communications between the major cities and Paris are good, communications by road are poor: the region possesses less than 100 miles of motorway.

Work is, however, underway to connect by the early 1980s Bordeaux with Tours and thence Paris to the north and Toulouse and Bayonne to the south. Spain will then have fast auto-route access to the markets of Europe.

The port of Bordeaux/Le Verdon has modern container facilities. MacAndrews and Company, a subsidiary of the United Baltic Corporation, has recently inaugurated a weekly roll on-roll off service between Bordeaux and Southampton. Full port facilities also exist at La Rochelle/La Pallice.

Foreign trade

In 1976 UK exports to the region totalled Fr 1,289 million (£153 million), 8.5 per cent of all UK exports to France. UK imports from the region were worth Fr 2,242 million (£255 million), representing 13.9 per cent of all French imports.

The dominant factor in this two-way trade is aircraft parts and accessories which account for about 24 per cent of total trade. Other main UK exports are chemicals and rubber products. UK imports are mainly agricultural products (particularly cereals) and chemicals.

The south-west's biggest trading partner is West Germany followed by the United States and Italy, with the UK in fourth place.

Opportunities for British exporters

Sales to the region can be achieved in a variety of ways. Some firms buy on their own account, but a larger proportion rely on stocks held by local agents or distributors who in turn may rely on principals further afield. There are virtually no agents in the south-west holding nationwide franchises but there are many holding exclusive rights in limited areas. For this purpose the region is often divided geographically into the two northern regions and the two southern ones.

Paris agents often neglect the south-west and it is frequently in a British firm's own interest to appoint an independent agent in this area. Local inquiries for sources of supply are regularly published by the Export Intelligence Service and the consulate-general, in conjunction with the British Overseas Trade Board, is happy to provide details of potential agents in the area.

As one would expect, main opportunities lie in the agricultural field and 20 UK manufacturers of an extensive range of agricultural machinery and equipment were represented through their French agents at the Bordeaux international trade fair in May. The market can, however, be specialised and 'standard' UK equipment may not always be appropriate to local conditions.

Most large towns have relatively new industrial zones. Factories are usually small and engage in a wide variety of light engineering activities. Many already deal with UK suppliers and most are prepared to consider the UK as a source of supply. The regional importance of the aerospace industry should not be underestimated and opportunities for specialist sub-contractors arise. There is a well-established pleasure-boat building industry along the coast catering for a growing domestic market.

A grape harvester built by Smallford Planters Ltd of St Albans at work in the Cognac vineyards.

Main towns' demand

In the main towns there is considerable demand for high quality British consumer goods. Textiles, ready-to-wear clothing and men's shoes are popular and there are opportunities for foodstuffs, novelties and articles connected with the tourist/holiday trade. Caravans and yachts from Britain are held in high regard and there is a growing potential in the leisure and sports goods markets. British-made sportswear is particularly sought-after.

Woodworking and furniture-making machinery and supplies offer export possibilities, as does equipment for the paper-making and processing industries. Carded textile manufacturers are heavily concentrated in south-west France and meet about 30 per cent of national production. Precision electronic industries are locally well-established as are manufacturers of electrical equipment. Both make substantial purchases.

Both the French government and local development authorities are keen to introduce food-processing and packaging industries to the region to combat unemployment in the smaller towns and by utilising local produce stabilise prices during the summer.

Good medium-term future

For the last decade the south-west has suffered from a lack of investment. This, coupled with poor land communications and the fact that the region lies on the periphery of the EEC, has greatly hindered industrial development. Completion of the motorways and, more important, the possibility of Spain's eventual admission to the EEC will provide the fillip necessary for development in the 80s. The medium-term future is good.

Warm welcome

In 1976 only 46 British businessmen visited the consulate-general. The modest opportunities offered by the region are worth double this figure and a visit to the commercial section of the consulate, if only during a holiday or whilst passing through the region, could lead to business. British businessmen will always find a warm welcome in the south-west. The consulate-general at Bordeaux is happy to provide detailed advice to exporters and to place its knowledge of local conditions and business contacts at the disposal of visitors.

Have you a good industrial news picture?

Pictures are published in *Trade and Industry* each week showing developments in British industry. If your company has introduced an interesting new product, if you have received an award, if you have developed a novel manufacturing process, if you have produced the biggest or smallest or heaviest or (you feel) the best designed product, you are welcome to send us a photograph with a short news story. Contributions should be sent promptly – while the subject is still newsworthy – to the Editor, *Trade and Industry*, Room 439, 1 Victoria Street, London SW1H 0ET.

Control of chemicals marketed in the US

The Toxic Substances Control Act will have a widespread effect on the activities of UK companies which export chemical substances to the United States. It is important that the companies concerned should become familiar with this legislation and with the regulations being issued to implement it; and that they should, when appropriate, take steps to have the chemicals they export included on the inventory of existing chemicals to be published by the United States Environmental Protection Agency. This article outlines the provisions and possible procedures of this important act.

The United States Toxic Substances Control Act came into effect on 1 January 1977. Under this law, the Environmental Protection Agency (EPA) may take action at any time against a chemical substance that it considers to present an unreasonable risk to health or to the environment. The main impact will probably begin to be felt as from the end of 1977. A proposed timetable of action is given in the table at the end of the article.

General provisions of the act

The act gives the EPA authority to issue rules prohibiting the manufacture in or import into the United States, and limit the amount imported or produced, of any 'chemical substance' which it considers may present 'an unreasonable risk to human health or the environment'. The manufacturer of the substance is responsible for providing evidence about the effects on health and the environment. The definition of chemical substance is wide.

All United States' manufacturers and processors of chemicals will be required to keep records and to make reports to the EPA. Importers are regarded as manufacturers for the purposes of this act, and must comply with all parts of the act for any chemical substances which they wish to import. The reporting regulations may require, inter alia, details of the chemical identity of the substance, whether the respondent is a manufacturer, processor, and/or importer and all existing data concerning the environmental and health effects of the substance, including both information generated by the manufacturer and any other which is reasonably ascertainable.

If the agency finds that a chemical may present a risk, but there is insufficient evidence upon which to make a decision, it may require the manufacturer to conduct tests to give the necessary data within a reasonable period of time. Similarly, if a substance is produced in substantial quantity and may enter the environment or result in significant human exposure and there is insufficient information about the effects of the substance on health and environment, the manufacturer may be required to conduct tests to provide adequate information.

Proposals for chemicals already manufactured in or imported into the US

Section 8(b) of the act requires the EPA to compile and publish by 11 November 1977 a list of all chemical substances which have been manufactured, imported, or processed for commercial purposes in the United States since 1 July 1974. Chemical substances not appearing on that inventory will be considered new chemical substances and, as such, will be subject to review by the EPA for a 90-day period before their manufacture or import for commercial purposes. However, the EPA on 2 August amended its earlier proposals for regulations relating to the inventory and in so doing has recognised that it will be unable to meet the statutory November deadline. A 'candidate list' – a draft list – of some 30 000 chemical substances has been compiled by the EPA. Its purpose is to simplify reporting for the inventory by providing a starting point for manufacturers, processors and importers. It is important to note that appearance of a chemical substance on the list does not imply that it actually has been manufactured for commercial purposes, since some listed substances may have been used, for example, solely in research. The only way substances from the candidate list will be included in the final inventory is for manufacturers, processors and importers to advise the EPA that the listed substance was actually produced, processed or imported subsequent to 1 July 1974. The candidate list contains all the information needed to identify substances in the list for the purposes of reporting to the EPA. Forms for reporting substances not found on the candidate list for inclusion in the final inventory are being prepared.

Where to get the candidate list

A copy of the candidate list is available for public inspection at the Overseas Tariffs and Regulations section of the Department of Trade in Room E14, Export House, 50 Ludgate Hill, London EC4M 7HU, tel. 01-248 5757 ext. 456. Copies of the candidate list are also available for reference at the regional offices of the Department of Industry in Newcastle, Manchester, Leeds, Nottingham, Birmingham and Bristol, as well as at the Scottish Office in Glasgow, the Welsh Office in Cardiff, and the Department of Commerce in Belfast.

The list will also be available for reference (together with the text of the act, the proposed inventory reporting regulations; draft reporting forms; a supplementary notice containing a guide to the use of the candidate list; and a commentary on reporting instructions) at the commercial library of the United States embassy in London. According to a notice published in the United States' *Federal Register* on 28 April, the EPA will make one copy of the candidate list available to each interested organisation and to individuals who are not associated with interested organisations at no cost as long as supplies last. Copies of the candidate list may be obtained from the EPA. Additional copies may be obtained, at a cost of $14 per set, directly from the Superintendent of Documents, US Government Printing Office (GPO), Washington DC 20402: the order number is GPO-055-007-00001-2.

Final inventory compilation

Using the authority of section 8 of the act, and the candidate list as a starting point, the EPA intends to compile the final inventory from reports prepared and submitted to the EPA by manufacturers, importers and processors of chemical substances. Under proposed rules for compilation of the inventory, published in the *Federal Register* on 2 August by the EPA, persons generally in the chemical and allied products sector of the manufacturing industry and the petroleum-refining sector as defined by SIC Major Group 28 and Group 2911 who have manufactured or imported chemical substances for commercial purposes since 1 January 1977 must report those substances; also, persons who have manufactured, processed or imported chemical substances for commercial purposes since 1 July 1975 may report those substances for inclusion in the inventory. The period for such reporting is tentatively set for November 1977 to early 1978, although these dates could change slightly when the final regulations are promulgated in November 1977. The proposed inventory reporting regulations prescribe:

What chemical substances may and may not be reported for inclusion on the inventory. Most naturally-occurring substances do not have to be reported since they will be automatically included on the inventory under the category 'naturally occurring chemical substances'. The inventory will exclude 1 mixtures, including inorganic glasses, ceramics, frits, cements; 2 impurities, by-products, with no commercial purpose; 3 pesticides, foods, food additives, drugs, cosmetics (which are covered by other United States' legislation) when manufactured, produced or imported for such uses; 4 chemical substances which are manufactured or imported in small quantitites solely for research purposes; and 5 chemical substances which are the result of certain chemical reactions.

How reports are to be made (eg the inclusion of information about the site of production or import and about the quantities produced and imported).

Exemption for small manufacturers and importers.

Procedures for reporting and handling claims of confidentiality.

Proposals for 'new' substances

The inventory will establish the existing chemical substances of commerce in the United States. Substances not on the inventory will be considered new and subject to pre-manufacturing notification. In such a case, a manufacturer or importer of a new chemical substance will be required to notify and supply to the EPA certain data concerning that substance at least 90 days before the substance is intended to be introduced into commerce in the United States.

During the 90-day period, the EPA will publish the name of that chemical substance and evaluate the content of the notice. The EPA may initiate regulatory action against the substance if insufficient data is submitted for it to evaluate the potential hazard posed by the introduction of that substance into commerce, or if the EPA determines that the substance may pose an unreasonable risk to human health or the environment. If the EPA takes no action within the 90-day period to delay or restrict the introduction of the substance into commerce, the substance may be manufactured or imported for commercial purposes. (Regulations establishing procedures to be followed, and the nature of data to be submitted under the pre-manufacturing notice provisions of the act, are currently being developed.)

Rules may also be issued defining 'significant new uses' of existing chemicals and the same pre-manufacture (or pre-importation) notification would be required before production (or importation) of a substance for such use. In the event that more than one manufacturer wishes to produce the same chemical, the act requires that the cost of producing the necessary test data shall be shared equitably.

Priority action by EPA on certain chemicals

A list of 15 potentially highly-dangerous chemicals and groups of chemicals for priority action has been announced by the EPA. All available information on these chemicals will be gathered to develop a 'management plan' for their regulation: discussion of the plans were initiated in August and it is expected that the exercise will have been completed by early January 1978. The chemicals concerned are:

Acrylonitrile
Arsenic
Asbestos
Benzene
Benzidene
Cadmium
Hexachlorobenzene

Lead
Mercury
Phosphates
Polynuclear aromatic hydrocarbons
Trichloroethylene
Tris (2-3 dibromopropyl) phosphate
Polybrominated biphenyls
Vinylidene chloride

Status of importers

It is important to note that the act defines 'manufacture' to include importation into the United States. United States' importers will be held responsible by the EPA for providing the necessary information about the chemical substances they have imported since 1 January 1977. However, the detailed information they, in turn, need will have to come from the foreign manufacturer. Such firms should therefore be prepared to supply to their importers the data needed to make appropriate responses to the inventory reporting requirements. While it will not be definite until the final rules relating to the reporting for the inventory are established by the EPA, the agency is considering procedures by which foreign manufacturers may report detailed information directly to the EPA on behalf of the importer, with the importer confirming this arrangement and perhaps supplying additional general information as to the substance reported. The reporting requirement is intended to be limited to chemical substances which are defined as follows:

any organic or inorganic substances of a particular molecular identity including:

a any combination of such substances occurring in whole or in part as a result of a chemical reaction or occurring in nature; and

b any chemical element or uncombined radical except that this term does not include substances already controlled by existing US legislation.

Publication of information

All information passed to the EPA by manufacturers will be available to the public and its existence will be notified in the *Federal Register*. There are provisions for the protection of commercially confidential information, but they do not extend to health and environmental effects data on any substance.

Inspection of manufacturing facilities

Various other sections of the act provide the EPA with authority to inspect manufacturing facilities, to require revision of quality-control procedures and to monitor the work of laboratories which provide test data required under the act. It is unlikely that these requirements will be applied to manufacturers in the UK, at least in the early stages of implementation.

Significance for exporters

This new law will have a significant effect on the chemical and allied industries and will possibly increase manufacturing costs. It is however important to note that the wording of certain key sections of the act is imprecise and much will depend on how loosely or rigidly the EPA decides to interpret these provisions when it draws up the necessary detailed implementing regulations. The agency must also produce, at an early stage, test protocols defining the extent of information that they will require as evidence that a substance will not present an unreasonable risk of injury to health and the environment.

The proposals will be published in draft, and foreign governments and industries will have an opportunity to comment. In this context, the United States' authorities see an important role for the Chemicals Group in OECD.

Points for action

It is hoped that British industry, with the government, will take full advantage of this opportunity and attention will be drawn to the drafts through *Trade and Industry* and the Export Intelligence Service. Meanwhile, UK manufacturers who export chemical substances to the United States should prepare to ensure that those substances are reported to the EPA for inclusion on the inventory in accordance with the procedure to be established.

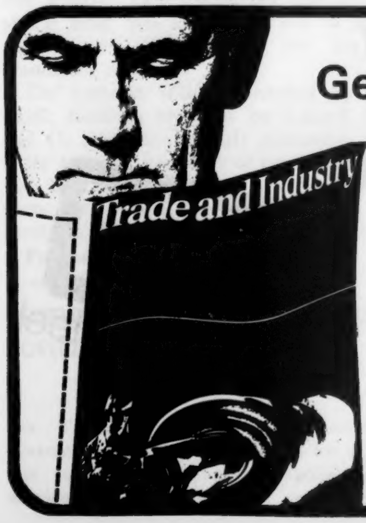
Inquiries

Inquiries about the act and its implications should be addressed to Mr A. Walker, Commercial Relations and Exports Division, Department of Trade, Room 433, 1 Victoria Street, London SW1H 0ET, tel. 01-215 5327.

Timetable

Some dates may change depending upon when the final regulations are published.

2 August 1977	*Federal Register* Notice of Re-proposed Regulations
2 August to 16 September 1977	Comment period of 45 days Submission of written comments to EPA
November 1977	Final regulations published
November 1977	Reporting forms mailed to SIC Groups 28 and 2911 and available from EPA
February 1978	End of reporting period. (90 days after the final regulations are published)
Summer 1978	Publication of inventory. Beginning of 120-day period during which processors may report chemical substances not on the inventory
Autumn 1978	Thirty days after publication of inventory, pre-market notification to begin



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Overseas trade exhibitions

UK nails business worth £1m at Chicago hardware show

From Harry Hall, British consulate-general, Chicago

Twenty-five British manufacturers of hardware and lawn and garden equipment dug in and hammered away for four days at the National Hardware Show in Chicago and by the end of the show they had nailed £1 million worth of business, in what is reported to be the largest show of its kind ever held in the United States.

The National Hardware Show was held in Chicago's lakefront exhibition hall from 22 to 25 August. All available exhibition space was taken up by some 2000 exhibitors, who displayed their wares on three floors of the exhibition centre occupying 450 000 sq ft of floor space. The show attracted a record number of 60 000 visitors. It was estimated by the organisers that more than 100 000 products were on display.

The British industry was well represented with 25 exhibitors split into two groups. One group sponsored by the British Hardware Manufacturers Association and the other by Gardenex, both groups being backed by the British Overseas Trade Board. The British group was joined in the show by other government exhibits from Canada, West Germany and Sweden, all competing for their share of the expanding market.

The British group attracted considerable attention with the most attractive booths in which they displayed cutting tools, hand tools and engineers tools in the hardware section, and garden tools, gardening aids and garden furniture in the lawn and garden section. Some were showing for the first time hoping to establish representation, while others were already well entrenched in the market. Their presence left no doubt about the importance British manufacturers attach to this growing market and its leading trade show for the industry.

In addition to the large amount of business which was written up by the British exhibitors at the show, they received some 300 very firm inquiries for their products which should eventually turn into solid business.

With rising costs in the United States the do-it-yourself industry has grown quite rapidly and retail sales for this year have reached a staggering size of $30 billion, which is $2 billion more than the previous year.

With the trend toward doing-it-yourself the need exists for much more than the nails, screws and hand tools, etc. to which most hardware stores had limited themselves in the past. Such stores are now carrying other items such as paint, timber, plumbing and heating supplies. Additionally, hardware stores stock further lines such as home appliances, giftware and automotive products, together with soldering irons, materials for putting up their own installations and for assembling storage building.

There are undoubted opportunities in the United States for British manufacturers of hardware and lawn and garden equipment. This was evidenced by the success of the two British groups at the show, all of whom have expresssed an interest in participating in next year's event which will again be held at McCormick Place in Chicago from 14 to 17 August 1978.

ECGD addresses

The Export Credits Guarantee Department's head office is at Aldermanbury House, Aldermanbury, London EC2P 2EL. (Tel. 01-606 6699). ECGD has 10 local offices in various parts of the United Kingdom, and these are listed from time to time in *Trade and Industry*.

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Overseas trade export successes

Pakistan sugar contract for Tate and Lyle

Tate and Lyle Engineering has won a contract valued at nearly £9 million for the supply of a sugar factory in Kamalia, Pakistan.

The factory, with a capacity of 2000 tons of cane per day, has a facility for extension to 3000 tons of cane per day for the production of refined sugar. The project is being carried out by the sugar division of the Punjab Industrial Development Board.

Tate and Lyle is designing and supplying the sugar-processing equipment, including cane mills and centrifugals which are being manufactured by Tate and Lyle Engineering's heavy machinery division, Smith-Mirrlees in Glasgow. Fabricated units are being manufactured in Pakistan; the civil and foundation works are being carried out by local contractors under the supervision of Tate and Lyle Engineering.

The project is due for completion in early 1979.

Further information: circle 745

Fertiliser complex contract won by Davy

Davy Powergas, a Davy International company, has signed a major contract, worth about £35 million, with Ini Petrokemija, Kutina, Yugoslavia for the design and supply of five plants forming part of the new fertiliser complex to be constructed at Kutina, Croatia.

The plants will produce 450 tonnes per day of nitric acid; 500 tonnes per day of ammonium nitrate; 1500 tonnes per day of sulphuric acid; 500 tonnes per day of phosphoric acid; 1500 tonnes per day of granulated fertilisers.

The contract will be financed by UK credit facilities arranged by Lazard Bros and Co and under ECGD guarantee. This is the latest of a number of major contracts won by Davy this year in widely different parts of the world. Davy's order books currently exceed £1,000 million worldwide.

Further information: circle 746

Kenyan communications contract

Pye Telecommunications has received a contract in excess of £1 million for a project to update and expand police communications in Kenya. The contract will cover a new police telephone and radio network linked together by the new L300 uhf multichannel link equipment.

The whole scheme will be installed during the latter half of 1978 during which period six installation and commissioning teams will be working simultaneously in Kenya.

Further information: circle 747

Decking for Iran fertiliser plant

A first export order for long-span decking to Iran has been received by the export division of H. H. Robertson (UK) Ltd for the new fertiliser plant at Shiraz.

The Chester-based firm is supplying 10 000 m² of the long-span decking to be installed in the off-site buildings – plant control, administration, medical centre, locker rooms and restaurant.

Long-span decking is a structural roof and ceiling panel with the strength to span up to 9.75 m. The profiled, galvanised steel panels form longitudinal cells which carry service pipes and cables and can be used for recessed lighting, and ceiling panels. At Shiraz, a suspended ceiling will be used because of the size of ductwork necessary.

Further information: circle 748

Freepost reader service

For further information on items in this section, circle the corresponding number on the reader services page near the end of the magazine.

Control instrumentation for Bangladesh plant

Taylor Instrument of Stevenage, has won an order for process control instrumentation valued at well over £300,000 from the Ashuganj Fertiliser and Chemical Co Ltd, Bangladesh, and their contractors Foster Wheeler UK.

The Taylor instrumentation comprises Quick-Scan 1300/1400 series electronic/pneumatic analogue controllers with associated 1300T/300T transmitters, 21 6 ft panels, 15 racks. and a central desk console. The equipment will be used to control and monitor the production of urea at the new fertiliser plant.

Further information: circle 749

Gas packs for Iran

Wellman Selas the Manchester-based combustion equipment and engineering specialists, has secured a contract valued at approximately £25,000 for the supply of Wellman Selas packaged gas burners and associated control equipment for use in the Iranian commercial and domestic sectors.

Further information: circle 750

UK-built frigate delivered to Brazilian navy

Niteroi, the first of six frigates ordered from Vosper-Thorneycroft Ltd of Southampton by the Brazilian navy, sails into Rio de Janeiro harbour on 23 August on her arrival from Britain. The vessel is one of the most up-to-date in the world, and is equipped with a wide range of armaments and other material supplied by British manufacturers. Three further frigates are due to be delivered to the Brazilian navy over the coming months, and two others are being built under Vosper-Thorneycroft licence at the navy arsenal in Rio de Janeiro. The transaction was financed by S. G. Warburg under an ECGD-backed credit facility.

Further information: circle 751

Piling in Poland

West's Piling and Construction, a West's Group International company, has been awarded its first contract for foundation piling in eastern Europe, at Wloclawek in Poland. The contract will be worth £75,000 approximately.

West's contract calls for $285\ mm^2$ Hardrive precast reinforced concrete piles, driven to a maximum depth of 25 m, to support a concrete windshield chimney 184 m high.

Under the contract West's will supply Hardrive pile units incorporating patented mechanical jointing system, rock shoes, certain items of specialist piling plant and equipment, supervision and labour.

Further information: circle 752

Rushed crusher

A £75,000 Braham Millar crushing and screening plant designed, built and despatched from the UK in 10 weeks has been delivered to Bahrain.

Capable of handling 50 tonnes per hour the plant takes its raw material from a feed hopper through a plate feeder into a primary crusher. The crushed material is taken by conveyor to a triple deck Niagara screening plant and sorted into four grades of material which are fed into 50 ton capacity storage bins. Rejects are returned to the primary conveyor for recycling. The unit is all electric powered and is designed for minimal maintenance with access panels and platform.

Further information: circle 753

Programmed pedigrees

Detailed records of half a million dogs are now instantly available to Australian Kennel Club officials thanks to a system called Checkmaster developed by the British firm System Aid and installed on the Royal Agricultural Society of New South Wales ICL computer.

The system is already in use by the British Friesian Cattle Society where it has replaced a manual system with a file of around 5 million index cards.

Before Checkmaster was installed, a 'batch' computer system was employed for the production of pedigree certificates, but this involved a long series of stages which could extend over several days. The new system employs 'real-time transaction processing', enabling each registration to be completed in a single operation carried out by a single clerk.

The Checkmaster system can also be used to handle the registration of other animals. The Australian society is now adding the records of cats, and these will be followed by those of cattle and goats in the near future.

Further information: circle 754

Lynx ordered by Denmark

Westland Helicopters has received an order from Denmark for seven Navy Lynx. One is seen here landing on the flight deck of the Royal Danish navy's fishery protection vessel *Beskytteren* during a demonstration tour in April. Westland Lynx will enter service with the Royal Danish navy in 1979, operating principally from frigates but also from shore bases. It will be used in a general coastal surveillance role and for fishery protection duties in Greenland, the Faroes and the North Sea. With this order Denmark becomes the fourth Nato country to buy Lynx.

Further information: circle 755

Quick delivery spurs exports

Cookson and Zinn of Hadleigh, Suffolk, has completed another quick delivery of tanks urgently required abroad.

Fourteen vegetable-oil storage tanks weighing 50 to 250 tons each (5000 to 55 000 gallons capacity) have been express shipped to Dubai for United Foods Ltd.

Also in Dubai, erection of six water storage tanks each containing 1000 tons of water is being completed for the Jedel Mina Ali Port complex and a further four tanks are on their way.

Another short-delivery-date order currently in manufacture is for £100,000 worth of steel tanks for vegetable oil storage for the Kaipara Refinery in New Zealand from the Imperial Foods Group.

A seven-day delivery from order to loading on express ship at Hull has been achieved for one water and one fuel tank urgently required by the Saudi Ministry of Minerals to provide drinking water and fuel oil for a mineral prospecting base camp in the desert 1000 miles north of Jeddah.

Further information: circle 756

A quiet place in Tehran

Plessey has received a contract to supply materials for the first anechoic chamber to be built in Iran. The $735\ m^3$ chamber is to be constructed at the Arya-Mehr University of Technology at Tehran.

The chamber, due to be commissioned in January 1978, is to be used for bistatic and monostatic cross-section measurements, voltage standing wave ratio (VSWR) impedance and far-field measurements of large antennas and dishes, antenna gain and beamwidth evaluation.

Following consideration of the university's requirements for using the chamber with a frequency range above 500 MHz and a minimum quiet zone of 2 m diameter, a chamber 15 m × 7 m × 7 m was designed having a computed performance of better than 25 dB at 500 MHz rising to 40 dB at 1 GHz. The chamber will be lined with profiled, multiple pyramids of 91 cm and 61 cm height respectively. A total of over 1200 blocks will be used.

Further information: circle 757

'T & I' index inquiries

Readers wanting to know when articles and items of information were published in *Trade and Industry* should consult the published indexes which are issued free to subscribers. For material published in recent months, inquiries of this kind can be made to the Department of Industry Library's indexing section, tel. 01-215 5842. (Alternative no 01-215 5051.)

Overseas trade country data

Australia

Fabrics of acetate yarn. The Australian government requested the Industries Assistance Commission last March to inquire into and report on the question as to whether further short-term assistance should be accorded the production in Australia of fabrics containing more than 50 per cent by weight of acetate, of a kind falling within items 51.04.9, 56.07.99, 60.01.91 or 60.01.92 of the customs tariff.

The commission made its report to the government on 29 April in which it recommended that no further short-term assistance additional to that provided, be accorded to the production of woven and knitted man-made fibre fabrics of a kind covered by the reference.

The government has now announced that it has accepted the commission's recommendation and that it has also decided that the general rule of not according by-law concessions to man-made fibre yarns, including acetate yarns, would be continued.

Inquiries: CRE 01-215 5319.

Ref: CRE 550/77

Injection moulding machines. The Australian Minister for Business and Consumer Affairs has asked the Industries Assistance Commission to inquire into and report on the by-law admission into Australia of certain injection moulding machines, identified as 'Toshiba', Model nos. IS 1600DN/175, IS 800B/63 and IS 630B/33. The inquiry will be held in public but the date and location have not yet been announced.

Further details will be published as soon as they are available.

Inquiries: CRE 01-215 5319.

Ref: CRE 1458/77

Further information

In many cases further information on the notices published on these pages is available to British exporters from the Department of Trade. The main branches concerned are: Commercial Relations and Exports (CRE) Division, 1 Victoria Street, London SW1H 0ET (tel: direct dialling); and Overseas Tariffs and Regulations Section (OTAR), Export Data Branch, Export Services and Promotions Division, Export House, 50 Ludgate Hill, London EC4M 7HU (tel: 01-248 5757). In each case, the relevant information source is indicated at the end of the notice by its initials (OTAR or CRE) and, in the case of OTAR, the telephone extension.

Files and rasps. A notice in *Trade and Industry*, 18 June 1976, reported a reference to the Industries Assistance Commission on the question of the need for long-term assistance for the local industry manufacturing certain files and rasps falling within tariff item 82.03.3.

The commission has now issued its draft report to give interested parties an opportunity to examine and comment on it before final recommendations are made and a further public hearing has been arranged for Wednesday, 5 October, commencing at 10.00am at the Public Inquiry Room, Industries Assistance Commission, Kings' Avenue, Canberra ACT 2600.

A copy of the draft report is available on loan from Department of Trade, Room 336, 1 Victoria Street, London SW1H 0ET.

Inquiries: CRE 01-215 5319.

Ref: CRE 1547/75

Worm gears, couplings and gear-boxes. The Australian government has received a request for temporary protection against the import of the following items:

Worm gears, complete, tariff item 84.63.500 (Code 17)
Couplings, complete, tariff item 84.63.990 (Code 75)
Gear boxes, complete, tariff item 84.63.990 (Code 213)

Requests for temporary protection are initially considered by the department concerned and at a later stage they may be referred to the Temporary Assistance Authority (TAA) for inquiry and report within 30 days of the date of the reference. Any temporary protection which may be awarded on the recommendation of the TAA is in the nature of a holding action pending consideration of the question of long-term protection for the local industry.

Interested parties who wish to make their views known on the question of protection for the local manufacture of these items should write to the Department of Industry, Canberra, ACT 2600, urgently so as to ensure that there is sufficient time for their communication to arrive before 30 September.

Inquiries: CRE 01-215 5319.

Ref: CRE 1526/77

Surgical dressings. Following a call for tender for the supply of surgical dressings to an Australian government department, the Australian Customs representative in London has been requested to conduct inquiries for the purpose of establishing a normal value for these particular goods in the United Kingdom.

It should be noted that where Australian government purchasing involves a substantial value and a tender includes the supply of foreign goods in competition with Australian goods, it is government policy to conduct inquiries overseas to establish whether the foreign tender involves goods offered at dumping prices.

Inquiries: CRE 01-215 5319.

Ref: CRE 36493/2

Bahrain

Port storage facilities. A notice in *Trade and Industry*, 11 July, page 84, stated that a four month period of grace would be allowed at the Isa town storage depot. Notification has been received that the Isa town depot is full.

No further details are available and alternative arrangements are not yet known.

Inquiries: OTAR 01-248 5757 ext. 475/480.

Bangladesh

Royalties. The Department of Industries of the government of Bangladesh has issued information relating to rates of payment which may be made to foreign collaborators for technical assistance for example, royalty, technical know-how fee, engineering services fee and technical assistance fee.

The information also includes a list of industries or groups of industries which may be considered suitable for technical collaboration. A copy of the information can be obtained from OTAR 01-248 5757 ext. 420/475.

Inquiries: CRE 01-215 5278.

Barbados

Cosmetics. By SI 1977 176, the Barbados authorities have announced that import licences are now required for cosmetics and other products for the care of the skin (tariff heading 33.06.9).

Inquiries: OTAR 01-248 5757 ext. 7312/456/457.

Brazil

Proposed increase in import duty. Customs Policy Council edital 858, published in the *Diario Oficial*, 8 August, gave notice that the council was considering a proposed increase in import duty on epsilon caprolacatam, under tariff heading 29.35.48.01, from 17 to 47 per cent.

Customs Policy Council edital 857, published in the *Diario Oficial* of 22 July 1977, gave notice that the council was considering an increase in import duty on moulded or pressed glass blocks, not optically polished, for the production of corrective lenses, under tariff heading 70.18.01.00, from its current rate of 9 to 39 per cent.

Customs Policy Council edital 855, published in the *Diario Oficial*, 13 July, gave notice that the council was considering a proposed increase in import duty on polystyrene, under tariff heading 39.02.01.02, from its current rate of 55 to 85 per cent.

Customs Policy Council edital 856, published in the *Diario Oficial*, 20 July, gave notice that the council was considering an increase in the import duty on cylindrical metal mesh (continuous or endless), whether or not rigid suitable for machines – specifically for paper making machines, under tariff heading 74.11.01.00 'ex', from its current rate of 17 to 47 per cent.

Inquiries: OTAR 01-248 5757 ext. 476/474.

Canada

Colouring agents in drugs and cosmetics. The Canadian Department of Health and Welfare proposed in Information Letter 504 that certain colouring agents used in drugs and cosmetics will be controlled by amendments to the Food and Drug Regulations.

Comments on the proposal should be made by 19 October 1977 to the Director, Bureau of Drug Surveillance, Place Vanier, Tower 'B', 355 River Road, Vanier, Ontario K1A 188.

Copies of the information letter are available from: OTAR 01-248 5757 ext. 455/456/457.

Chile

Specific duties. Ministry of Finance decree 771, published in the *Diario Oficial* on 1 September, introduces specific duties affecting imports into Chile on the following items (these are in addition to the existing *ad valorem* duties):

Tariff no./Commodity	Specific duty in 'gold pesos'/per kg
17.01.02.01 Fully refined sugar ('sacarosa')	$0.176
17.01.02.99 Other refined sugars	17.6 (gross metric quintal)
17.02.01.99 Other glucoses except refined dextrose	0.08
17.02.09.00 Other sugars	0.08
17.02.11.00 Sugar syrups	0.08
17.02.16.00 Caramelised sugar and molasses	0.05
17.04.00.01 Caramels, pastilles and the like	0.14
17.04.00.02 Chewing gum	0.07
17.04.00.99 (01) Milk sweet	0.13
17.04.00.99 (02) Pumpkin and tomato sweets	0.08
17.04.00.99 (99) Other sugar confectionery (with no cocoa content)	0.08
17.05 Flavoured or coloured sugars, syrups, and molasses, but not including fruit juices containing added sugar in any proportion	0.08
18.06 Chocolate and other food preparations containing cocoa	0.13
20.05 Jams, fruit jellies, marmalades, fruit 'puree' and fruit pastes, being cooked preparations whether or not containing added sugar	
20.05.01.00 Of pineapple	0.09
20.05.02.00 Of 'mango' and 'papaya'	0.09
20.05.03.00 Of peach	0.09
20.05.04.00 Of apricot	0.09
20.05.05.00 Of strawberry and raspberry	0.09
20.05.06.00 Of sour citrus	0.09
20.05.07.00 Of plum	0.09
20.05.08.00 Of quince	0.09
20.05.09.00 Of cherry	0.09
20.05.89.00 Of other	0.09

Inquiries: OTAR 01-248 5757 ext. 474/476.

Colombia

Duty amendments and concessions. Colombian decree 1908 of 16 August reduced the import duty on glass textile fibres and their manufactures in tariff headings 70.20.02.01, 70.20.02.02 and 70.20.02.03 from 40 per cent to 25 per cent and those in 70.20.02.04 and 70.20.02.99 from 45 per cent to 35 per cent *ad valorem* cif.

The same decree granted the following concessions:

Stearoil-2-calcium lactilactate and stearoil-2-sodium lactilactate products in tariff heading 29.16.01.99 shall pay import duty of 0.1 per cent with the prior approval of the Ministry of Public Health;
Oxyme-based preparations in tariff heading 38.19.89.99 shall pay import duty of 5 per cent until 31 December 1977;
Appliances for the projection, dispersion or spray of liquid insecticides, fungicides and the like under heading 84.21.01.01, designed exclusively for installation on fumigation aircraft, shall pay import duty of 1 per cent if imported by air fumigating companies or aircraft assembly industries, with prior approval of the Department of Civil Aeronautics.

Inquiries: OTAR 01-248 5757 ext. 474/476.

Costa Rica

Dairy refrigeration equipment. Decree 7178-H, published in *La Gaceta*, 19 July, exempted dairy refrigeration equipment and spares and accessories from sales tax and selective consumption tax. These imports must be made by registered responsible parties. The exemptions will be effected by means of written authorisation from the Direccion General de la Tributacion Directa, which the purchaser must present to the customs or his local supplier and without which free purchase may not be made.

Inquiries: OTAR 01-248 5757 ext. 476/474.

Federal Republic of Germany

Food products. The German authorities have made an order dated 28 July entitled 'An Order on the Treatment of Food Products of Animal Origin during Production'.

Copies are available in German from: OTAR 01-248 5757 ext. 467/466/288.

Minced meat. The German authorities have made an order dated 13 June amending the Minced Meat Order.

Copies are available in German from: OTAR 01-248 5757 ext. 467/466/288.

Guyana

Drugs and medical devices. The Guyana authorities have informed importers that, with effect from 1 August 1977, importations of the following articles must be effected through state-owned Guyana Pharmaceutical Corporation Ltd (National Ordering Committee):

Pharmaceuticals and drugs
Intravenous fluids, sera and vaccines
Surgical and general hospital equipment, including instruments and appliances
Surgical goods (eg gloves, catheters)
Surgical dressings
Dental instruments
Animal and poultry products (veterinary)

Inquiries: OTAR 01-248 5757 ext. 7312/456/457.

Food and drugs regulations. The Guyanese authorities have published the Food and Drugs Regulations, 1977, containing legislation on labelling and standards for food, drugs, cosmetics and medical devices. The regulations will operate with effect from 1 November.

Inquiries: OTAR 01-248 5757 ext. 7312/456.

India

British preference documentation. Further to the notices in *Trade and Industry* on 22 October 1976 and 28 May 1976, the final stage of the elimination of the margin of preference formerly afforded to some British goods became effective on 1 July 1977.

Subsequently the Indian authorities have informed the British high commission in New Delhi that the special combined invoice and certificate of value and origin forms A, B and C previously necessary when claiming the British preferential rate are no longer appropriate.

Instead, all goods require an ordinary commercial invoice. Every invoice (which must be signed) should give particulars of packing, specification, weights and measurements of individual packages. Although not a requirement it is useful to provide a certificate of value typed on the invoice.

Inquiries: OTAR 01-248 5757 ext. 420/475/7062.

Japan

Food sanitation law. The following are amendments to the permitted additive substances in foodstuffs published in the sixth edition of the Food Sanitation Law (*Trade and Industry*, 4 March 1977).

Page 86: Amend column showing additives used anti-caking and free flowing agents: *Delete:* 'Kieselguhr; *Add:* 'Diatomaceous earths and perlite'.
Page 87: *Add* to additives column after' Diphenyl':
o-Phenylphenol } Citrus fruits (Residue in food)
Sodium o-Phenylphenel } 10

Inquiries: OTAR 01-248 5757 ext. 420/475.

Food regulations. Under the Food Sanitation Law the Japanese authorities brought into effect on 1 August 1977 new regulations concerning certain foods packed in an airtight container sterilised with heat and pressure.

These regulations do not apply to soft drinks, meat products, whale-meat products and fish paste products, but see below.

The regulations relating to testing procedures are complex and technical but the requirements include the following:

A two stage test procedure which must produce negative results:
1 a sample of the food in its packaging kept for 14 days

at a temperature of 35 °C and then cooled to 20 °C to examine if the packaging swells or anything leaks from inside;
2 tests carried out to examine whether microbes are present using a culture medium.

Sterilisation with heat and pressure must be carried out using a method which effectively destroys microbes in food. In the case of food where there is a possibility of food poisoning caused by *botulinus* (ie food which is both over 5.5 in pH and over 0.94 in hydroactiveness) the method of sterilisation should be to apply heat at a temperature of 120 °C for four minutes or any other method with an equivalent effectiveness.

No synthetic chemical substance of food additive (other than sodium hypochloride) may be used other than those that have already been used in individual ingredients before packaging.

Where containers are made of vinyl chloride resin the density of residual vinyl chloride monomer must be below 1 ppm.

In addition to the above regulations which came into effect on 1 August 1977 the present situation which includes some new regulations is summarised below:

Soft drinks

1 No arsenic, lead or any other heavy metal must be detected with the exception of tin attributable to the container or packaging;
2 such tin must not exceed 150 ppm;
3 no colon bacillus must be detected;
4 bottles containing soft drinks must be transparent.

Meat products, whale meat products and fish paste products

1 No colon bacillus must be detected;
2 products must be preserved at a temperature of 10 °C or below. There are two exceptions:
  2.1 frozen products which must be preserved at a temperature of minus 15 °C or below;
  2.2 products that have been heated at a temperature of 120 °C for four minutes (or sterilised using an equally effective method) after packing in airtight containers;
3 ham, sausage, bacon (including whale meat bacon) and cornbeef must not contain more than 70 ppm of nitrites (NO_2). Fish meat sausage and fish meat ham must not contain more than 50 ppm of nitrites (NO_2);
4 products other than dry sausages must at the time of manufacture be sterlised by heating them at 63 °C for 30 minutes (or by using an equally effective method).

British exporters are advised to check with Japanese local authorities through their agents that their products conform with the regulations.

Inquiries: OTAR 01-248 5757 ext. 420/475.

Lebanon

Customs duty amendments. The Lebanese *Official Gazettes* 23, 24, 25 and 26 of 28 July, 4, 11 and 18 August published details of amendments to the customs tariff for the following CCCN:

25.23, 70.19, 87.02

Inquiries: OTAR 01-248 5757 ext. 475/7062.

Foodstuffs. The Lebanese *Official Gazette* 26 of 18 August published details of decision 9/77 concerning the marking of imported eggs and dead poultry which became effective as from 1 September 1977.

Details of articles 1 to 3 of the decision are as follows:

1 Edible poultry eggs, the import of which is allowed, shall be marked with the word 'Imported' as well as with the name of the country of origin.
2 Each bird of frozen poultry, the import of which is allowed, shall be wrapped in an envelope on which the following details shall be shown: Date of killing, grade and country of origin.
3 The marking stipulated in 1 and 2 above shall be clearly noticeable and indelible.

Inquiries: OTAR 01-248 5757 ext. 475/7062.

Luxembourg

Foodstuffs. The Luxembourg *Memorial* A49, 17 August, published a decree dated 14 July which implements the EEC directive of 18 December 1975 concerning certain concentrated and dehydrated milks intended for human consumption. The decree enters into force on 1 January 1978.

Copies of this decree (in French) are available from: OTAR 01-248 5757 ext. 288/466/467.

Oman

Obtaining a visa. The following regulations now apply to UK business visitors currently resident in the UK:

1 Applicants who already have connections in the Sultanate will have to attach to their application forms a letter from the firm or government department they wish to visit in Oman in which it gives the name or names of person/persons who will be visiting Oman, the dates of their arrival in Oman and the duration of their stay there.
2 Applicants who do not already have connections in the Sultanate will have to produce a letter from: The Arab British Chamber of Commerce, PO Box 4BL, 42 Berkeley Square, London W1X 5DB, tel. 01-629 1249.
3 The application form (obtainable from the Oman embassy) is to be in triplicate with three passport size photographs and with a letter of recommendation from the visiting businessman's company or firm.
4 Vaccination certificates against cholera and smallpox will be required by the Health Authorities in Oman.
5 It is regretted that any application without the documents mentioned in 1 or 2 above will not be accepted.

Inquiries: CRE 01-215 5221.

Agricultural quarantine law. This decree which was published in the *Official Gazette* of 1 August provides, inter alia, that:

1 No plants (defined as any type of plant or its live or dead parts including straw, twigs, tubercles, bulbs, cereals, palm stumps, wood buds, cords, rubber, wood roots, stems, leaves, flowers, fruits, seeds, vines, rhizomates and seedlings) or plant products (defined as that which are originally plant and have been arranged in such a way as not to change their originality) or their filling or packaging materials shall be allowed to enter the country without the approval of the Agricultural Quarantine authorities after assurance of their being free from agricultural pests and of the availability of arrangements for the treatment of agricultural consignments before shipment from the exporting country;
2 Plants and plant products may be destroyed (without compensation) or returned to exporters if the percentage of damage exceeds that laid down in the provisions and regulations of the law;
3 Importation of agricultural soil and organic manure shall be prohibited except under terms allowed by rules and regulations;
4 All cereals, seeds, seedlings and materials for seed growing and proliferation shall be accompanied by an agricultural health certificate (defined as an official document of international standard issued by the responsible government authorities in the country of export, indicating the absolute safety of consignments in general and safety from pests prohibited to enter the importing country in particular);
5 All imports shall be through a point of entry defined by the rules and regulations;
6 The minister may prohibit the entry of some plants or plant products even though they are free from agricultural diseases.

The decree empowers the Minister of Agriculture, Fisheries, Petroleum and Minerals to issue ministerial decisions and orders to ensure the organisation and implementation of its Agricultural Quarantine Law. No such decisions or orders have yet been promulgated.

Inquiries: OTAR 01-248 5757 ext. 475/420.

Peru

International fairs. Supreme decree 006-77-CO-CE of 1 April sets out regulations relating to International Fairs and Exhibitions.

A copy of an unofficial translation of the section of the regulations relevant to foreign exhibitors participating in international fairs in Peru and the benefits available, is obtainable from OTAR 01-248 5757 ext. 474/476.

Portugal

Tariff amendments. *Trade and Industry*, 3 December 1976, published details of decree law 729/76 which announced that, with certain exceptions, the specific duties on a range of items imported into Portugal would be doubled.

The Portuguese government has now announced, in *Diario da Republica* 181, 5 August, decree law 315/77, which adds the following tariff items to the list of goods excepted from the doubling of duties:

27.06, ex 27.08, ex 44.05, ex 48.21, ex 56.05, ex 70.13, ex 73.27, ex 74.01, 76.07.

These changes do not affect any duty charged on goods of EEC or Efta origin.

Inquiries: OTAR 01-248 5757 ext. 458/461.

Economic measures. Following a package of austerity measures in February, the Portuguese government announced a further series of measures on 25 August, numbering 41 in all, designed to reduce the balance of payments deficit, to re-establish financial stability in commerce and to encourage savings.

The measures which are most likely to be of interest to British firms trading with Portugal are:

1 a controlled float of the escudo by the Bank of Portugal;
2 an increase in interest rates by an average of 4 per cent for both lending and time deposits;
3 existing controls on credit to be strengthened and made more selective, although credit for agriculture, fisheries and housing will be eased;
4 new conditions to be introduced for medium and long term lending by commercial banks and a review of liquidity ratios;
5 public expenditure to be cut by up to 20 per cent by freezing some budgetary votes and slowing progress on major projects with a high import content;
6 establishment of an economic development fund to promote productive investment in certain areas.

Inquiries: CRE 01-215 5341.

St Lucia

Consumption tax. By SR&O 1977 38, the St Lucia authorities have announced the following amendments to the rates of consumption tax payable on the items listed below:

CCCN/Description of goods	Rate of tax
27.10.23 Motor spirits (gasolene and other light oils for similar uses) including gasolene blending agents	46.25 c per gal
27.10.29 Other motor spirits	46.25 c per gal

27.10.40 Gas oil, diesel oil	27.50 c per gal
85.15.40 Radio broadcast receivers	10% *ad val.*
85.15.50 Radio broadcast receivers with recorders	15% *ad val.*

Inquiries: OTAR 01-248 5757 ext. 7312/456/457.

South Africa

Tariff application. Customs tariff application list 22/77, published in the South African *Government Gazette*, 9 September, contains an application to the Board of Trade and Industries for increase in duty on:

1. Glassware (excluding articles falling under heading 70.19) classifiable under the tariff subheading 70.13.
2. Transformers rated at 5 kVA or more with a maximum working voltage of 145 kV classifiable under tariff subheading 85.01.40.
3. Unwrought zinc (excluding alloys thereof) classifiable under tariff subheading 79.01.15.

Those British trade organisations thought to be interested in the application are being informed. Any British firm affected which wishes to make representations to the South African Board of Trade and Industries and belongs to a trade organisation should, therefore, first contact its own trade association.

If any firm proposes to make independent representations to the South African authorities and requires further information concerning the application, it should address inquiries to CRE 01-215 5274.

Footwear. The South African Footwear Metrication Committee has named June/July 1978 as the period from which domestically manufactured and imported shoes will be sold in Mondopoint length sizes. All footwear may be dual-marked for 12 months after the implementation period but Mondopoint will take precedence.

Inquiries: OTAR 01-248 5757 ext. 471/472/473/462.

Budget 1977. The Minister of Finance, Senator Horwood, who announced in his budget that dividend transfers by non-resident controlled enterprises would be limited to income earned after 1 January 1975, has now decided that this date will *not* be moved forward annually.

Inquiries: CRE 01-215 5274.

Customs tariff changes. The following amendments were published in the South African *Government Gazette*, 12 August:

R1554 CCCN 73.23 and 76.10: The rate of duty on milk or cream cans of iron, steel or aluminium is increased to 25 per cent.

R1555 CCCN 85.19: Specific provision is made for lampholders for fluorescent lamps and the rate of duty thereon is increased from 5 per cent (general) and free (preferential) to 20 per cent (general).

Industrial rebates

R1556 Item 320.04. CCCN 39.01: The provision for a rebate of duty on laminated artificial plastic material for the manufacture of rugby, soccer and similar balls is withdrawn.

R1561 Item 320.04. CCCN 59.08: Provision, with retrospective effect to 3 December 1976, is made for a rebate of the full duty on textile fabrics impregnated, coated, covered or laminated with artificial plastic materials, for the manufacture of rugby, soccer and similar balls.

Inquiries: OTAR 01-248 5757 471/472/473/462.

United States

Agar-agar. The *Federal Register*, 19 August, published a proposal by the Food and Drug Administration to affirm the Gras status of agar-agar as a direct food additive with specific limitations. Written comments (four copies) should be sent by 18 October to FDA, Room 4-65, 5600 Fishers Lane, Rockville, MD 20857.

Inquiries: OTAR 01-248 5757 ext. 456/457/7312.

Self-pressurised containers. The *Federal Register*, 24 August, published a final notice by the Consumer Product Safety Commission requiring self-pressurised consumer products using a chlorofluorocarbon propellant to be labelled with a warning. The regulation to be effective on 20 February 1978.

Inquiries: OTAR 01-248 5757 ext. 456/357/7312.

Medical devices. The *Federal Register*, 19 August, published a proposal by the Food and Drug Administration to establish a procedure banning the use of a medical device that would present a risk to the user.

Written comments (four copies) should be sent by 18 October to FDA, Room 4-65, 5600 Fishers Lane, Rockville, MD 20857.

Inquiries: OTAR 01-248 5757 ext. 456/457/7312.

Architectural glazing materials. The *Federal Register*, 22 August, published a rule by the Consumer Product Safety Commission which stays from 6 July to 3 December the application of the standard for architectural glazing materials applied to laminated glass in category II products.

Inquiries: OTAR 01-248 5757 ext. 456/457/7312.

Standards of fill for wine. The *Federal Register*, 22 August, published a rule proposed by the Bureau of Alcohol, Tobacco and Firearms to permit the use of a wider variety of wine containers larger than 3 litres and other concessions. Written comments should be sent by 21 October to Regulations and Procedures Division, Bureau of Alcohol, Tobacco and Firearms, Washington DC 20226.

Inquiries: OTAR 01-248 5757 ext. 456/457/7312.

Medical devices registration. The *Federal Register*, 23 August, published details of a final rule by the Food and Drug Administration setting out procedures for the registration of establishments which produce devices intended for human use.

Inquiries: OTAR 01-248 5757 ext. 456/457/7312.

Securities and Exchange Commission. The Securities and Exchange Commission has deferred the effective date of new beneficial ownership disclosure requirements which were due to become effective on 31 August until 30 April 1978.

Inquiries: CRE 01-215 5629.

New boycott guidelines. The US Secretary of the Treasury has issued new guidelines relating to provisions of the Tax Reform Act of 1976 which deny certain tax benefits for participation in or co-operation with international boycotts. Written comments (six copies) and requests for a public hearing must be delivered or mailed by 30 September 1977.

Inquiries: CRE 01-215 5401.

Carnets. The United States Customs Service has announced that it will not accept ECS (Echantillons Commerciaux – Commercial Samples) carnets issued after 10 August for temporary duty-free admission of commercial samples into the United States.

ATA (Admission Temporaire – Temporary Admission) carnets will be accepted for that purpose. The United States on recommendation of the Customs Co-operation Council, has withdrawn from the convention which provides for the use of ECS Carnets.

Inquiries: CRE 01-215 5629.

Venezuela

Import restrictions on cheese. The Venezuelan Ministry of Development announced on 31 August 1977 that the temporary exemption from import duty and licensing no longer applies to cheese, CCCN 04.04.

Inquiries: OTAR 01-248 5757 ext. 474/476.

Validity of import licences. It was reported in the Venezuelan press on 6 September that the Ministry of Development has decided that all import licences issued with effect from 10 August, will be valid for one year from the date of issue.

Inquiries: OTAR 01-248 5757 ext. 474/476.

Tariff modification. Ministerio de Hacienda resolution 1440 published in the *Gaceta Oficial*, 20 July, modifies tariff no. 84.15.89 by the addition of a new sub-heading for condenser units as follows:

CCCN		Description	Duty
84.15.89.03		Refrigerating compression modules (condenser units)	
	01	Up to ¼ hp	70%
	02	Greater than ¼ up to 3 hp	60%
	03	Greater than 3 up to 10 hp	41%
	99	Other	5%

This resolution comes into effect from 22 July 1977.

Inquiries: OTAR 01-248 5757 ext. 474/476.

CRE	Commercial Relations and Exports Divisions Tel. Direct dialling (see end of each notice)
OTAR	Overseas Tariffs and Regulations Section Tel. 01-248 5757 (extension at end of each notice)

Statistics

The economy: selected indicators

Series are seasonally adjusted except where shown otherwise

	Gross domestic product (average estimate)	Consumers' expenditure	Fixed capital expenditure			Changes in stocks				Balance of payments		
				of which			of which					
			Total	Manufacturing industry	Distributive and service industries excl. shipping	Total	Manufacturing industry	Wholesalers	Retailers	Current balance	Visible balance	Invisible balance
	at 1970 prices		at 1970 prices			at 1970 prices				at current prices		
Base of index	1970											
Series in		£ million		£ million			£ million				£ million	
Stock level at end-1976						18,041	10,529	1,830	1,929			
1970	100.0	31.644	9,453	2,130	1,799	444	325	68	−16	733	−25	758
1971	101.7	32,505	9,682	1,991	1,930	92	−148	52	18	1,087	280	807
1972	104.3	34,402	9,797	1,738	2,071	34	−145	48	15	131	−702	833
1973	110.2	36,003	10,253	1,753	2,414	1,321	597	102	379	−752	−2,334	1,582
1974	109.9	35,590	10,287	2,028	2,414	596	634	81	−109	−3,380	−5,221	1,841
1975	107.7	35,234	10,062	1,744	2,034	−743	−429	−111	−65	−1,650	−3,195	1,545
1976	108.9	35,290	9,724	1,659	1,974	66	5	23	9	−1,458	−3,574	2,116
1975 1st qtr.	109.5	8,988		472	516		−31	−23	−44	−541	−947	406
2nd qtr.	107.4	8,833		446	513		−74	−51	−61	−309	−655	346
3rd qtr.	106.6	8,724		420	512		−209	−26	16	−579	−967	388
4th qtr.	107.4	8,689		407	494		−115	12	24	−221	−626	405
1976 1st qtr.	109.1	8,811		405	471		0	26	33	−117	−534	417
2nd qtr.	108.2	8,730		407	489		−66	−20	−45	−397	−915	518
3rd qtr.	108.3	8,824		421	506		−2	14	16	−538	−1,143	605
4th qtr.	110.0	8,925		426	508		73	3	5	−406	−982	576
1977 1st qtr.	109.1	8,720		419	507		125	51	72	−327	−968	641
2nd qtr.		8,620pe		432 p	512 p		128 p	29 p	−5 p	−50	−710	660 e
% change last 2 qtrs. on prev. 2 qtrs.	+1.2	−2.3		+0.5	+0.5							
on a year earlier	+1.2	−1.1		+4.8	+6.1							

	Industrial production		Personal expenditure		Prices and earnings					Labour (UK)			Visible trade (Volume)	
	Total all industries	Total manufacturing industries	Retail sales	Cars: new registrations	Retail prices		Wholesale prices: all manufacturing industry		Average gross earnings of all employees (GB, all industries and services covered)	Unemployed excluding school leavers and adult students		Unfilled vacancies for adults	Export	Import
				monthly averages		% increase on a year earlier	basic materials and fuel used	manufactured products: home sales		mid-month count	% of total employees	mid-month count	On a balance of payments basis	
	at 1970 prices		at 1971 prices		(not seasonally adjusted)				(old series)				at 1970 prices	
Base of index	1970	1970	1971		Jan. 1974		1970	1970	Jan. 1970				1970	1970
£m in base year			15,895										7,907	7,932
Series in				thousands						thousands		thousands		
1971	100.3	99.4	100.0	108.5	153.4†	9.4	104.6	109.0	119.4	775.8	3.4	130.9	106.7	104.2
1972	102.5	102.0	105.8	138.6	164.3†	7.1	109.2	114.8	134.8	854.9	3.7	147.3	107.1	116.7
1973	110.0	110.6	110.7	137.1	179.4†	9.2	144.5	123.2	152.6	611.0	2.6	307.0	122.2	133.8
1974	106.9	108.9	109.9	102.8	108.5	16.0	215.3	152.0	179.6	599.7ø	2.6ø	302.7ø	131.2	136.2
1975	101.7	102.4	107.9	97.2	134.8	24.2	235.4	188.7	227.6	929.0	3.9	150.0ø	125.6	126.4
1976	102.2	103.4	108.1	104.7	157.1	16.5	299.0	219.6	263.3	1,269.8ø	5.4ø	120.4ø	135.9	134.2
1976 1st qtr.	101.4	101.6	107.3	103	149.4	22.5	266.5	206.9	250.9	1,220.3	5.2	116.7	131.5	126.1
2nd qtr.	102.5	103.6	107.6	106	154.9	16.0	292.6	214.4	258.6	1,252.1	5.3	119.4	137.1	134.6
3rd qtr.	101.8	103.8	108.9	97	158.5	13.7	306.8	223.2	265.5	1,305.5	5.5	123.6	134.2	137.9
4th qtr.	103.1	104.7	108.5	113	165.8	15.0	329.9	233.9	272.8	1,316.8ø	5.6ø	..	140.8	138.1
1977 1st qtr.	103.6	105.6	105.0	104	174.1	16.5	341.5	248.0	280.2	1,330.2	5.6	..	140.7	142.4
2nd qtr.	102.0	102.9	103.9	102	181.9	17.4	347.8	259.2	285.3	1,330.4	5.6	159.2	148.8	144.0
1976 July	101.8	104.0	108.8	91	156.3	12.9	302.0	219.8	263.1	1,288.9	5.5	118.6	130.4	139.4
Aug.	101.2	103.1	108.9	115	158.5	13.8	304.0	223.4	267.2	1,308.8	5.6	126.2	134.9	133.7
Sept.	102.3	104.3	108.9	86	160.6	14.3	314.4	226.3	266.1	1,318.7	5.6	125.9	137.3	140.4
Oct.	102.7	104.8	108.1	109	163.5	14.7	327.7	230.0	269.0	1,307.9	5.5	124.5	140.8	140.6
Nov.	103.3	104.9	109.2	119	165.8	15.0	331.8	234.6	272.2	..	..	..	138.1	140.1
Dec.	103.4	104.4	108.3	111	168.0	15.1	330.2	237.2	277.1	1,325.7 e	5.6 e	..	143.3	133.6
1977 Jan.	103.7	105.5	106.7	93	172.4	16.6	337.8	244.9	278.1	1,338.2	5.7	..	141.0	153.9
Feb.	103.4	105.6	105.7	118	174.1	16.2	339.5	248.2	278.7	1,331.4	5.6	150.5	138.3	133.8
Mar.	103.6	105.8	103.1	102	175.8	16.7	347.2	250.8	283.8	1,321.1	5.6	157.3	142.9	139.4
Apr.	102.5	103.7	103.4	108	180.3	17.5	349.7	255.4	283.1	1,322.6	5.6	158.5	148.8	138.6
May	103.6	105.1	104.4	108	181.7	17.1	348.3	259.8	286.2	1,315.9	5.6	161.2	145.0	142.2
June	100.0	100.0	103.8	90	183.6	17.7	345.2	262.4	286.7 p	1,352.9	5.7	157.8	152.5	151.3
July	101.8 p	102.8 p	107.0	109	183.8	17.6	344.9 p	265.7 p		1,402.2	5.9	152.7	152.1 p	149.0 p
Aug.			107.0 p				340.0 p	268.0 p		1,413.9 p	6.0	154.1 p		
% change latest 3 months on prev. 3 months	−1.3	−2.3	+2.1	−6.4	+3.6		−1.4	+3.9	+1.8	+5.3			+ 4½	+7½
on a year earlier	−0.6	−1.2	−2.3	+5.1	+17.5		+13.7	+20.6	+10.3	+8.0			+11	+7½

p Provisional   pe Preliminary estimate   † Base of index Jan. 1962 = 100   .. Not available   ø Average of available months   e Estimate

Inquiries: 01-215 3453

Survey of short-term export prospects

Department of Trade's eighth survey of export prospects of the UK's top exporting companies

Estimates for total exports

On the basis of the survey information, the seasonally adjusted volume of total UK exports in the second half of 1977 is expected to be around 5 per cent higher than in the first half of the year, about the same increase as occurred between the second half of 1976 and the first half of 1977. For 1977 as a whole, the volume of total exports, on present survey-based estimates, is put at around 9 per cent above the 1976 level. Indications for the first quarter of 1978 are, at this stage, more tentative, but the figures appear to suggest a slow-down in growth in that period. The estimates for 1977 present a slightly more buoyant picture than those derived from the results of the previous, seventh, survey (although the volume forecasts for the large exporters are little changed – see Note on estimates).

Survey results

In this survey, the period covered was the second quarter of 1977 to the first quarter of 1978. Replies have been received from 66 companies, covering three-eighths of the total value of UK exports.

The questionnaire asked for the actual value of firms' export deliveries in the second quarter of 1977 and forecasts for the subsequent three quarters; the percentage change these values represented over the same quarter a year earlier; and how this change was divided between movements in prices and in volume.

The results from totalling the figures received from the 66 companies are shown in table 1. A comparison of the latest survey results with those from previous rounds is given in table 2. The main features of the latest survey (based on non-seasonally adjusted data) are:

1 The volume forecasts of the large exporters are similar to those of the seventh survey. They suggest that, in the second half of 1977, the volume of the major companies' exports will be 13 per cent higher than in the same period of 1976. The volume increase of 15½ per cent shown for the first quarter of 1978 is from a relatively subdued first quarter 1977 level.

2 The latest estimates of price increase, on a year earlier, of the large exporters are slightly lower than those forecast in the previous survey, and show a slow-down in the rate of increase through 1977 and continuing in the early part of 1978.

3 Taking volume and price movements together, by the end of the forecast period the value of exports of the large exporters is estimated at around 24 per cent higher than a year earlier.

Note on estimates

Articles on previous surveys have included various qualifications about interpreting the results. In particular, they have commented on the degree of variation in the successive forecasts made by the companies themselves, their relationship to the outturn they subsequently report (see table 2), and also the relationship between the recorded information for the large exporters and for total exports (see table 3). Forecasts of the volume of total UK exports, based on the large exporters' results, were made, for the first time, in the analysis of the previous, seventh, survey. This has been continued for the present survey. The more recent information on total exports has altered slightly the assessment of the relationship between the large exporters and total exports. Hence, while the volume forecasts for the large exporters are little changed from the seventh survey, the forecasts for total exports are now more buoyant than before. The forecasts must continue to be regarded with appropriate caution.

An article on the survey was published in *Statistical News*, no. 38, August 1977. This discussed the reason for the introduction of the inquiry; described how it has been run; and explained some of the problems inherent in it and the attempts being made to solve them. **Inquiries:** 01-215 3155.

Table 1 Movement in UK exports between Q2 1977 and Q1 1978 by value, volume and price

		Recorded UK exports [1]	Eighth survey results for major exporters [2]			
		1977	1977			1978
		Q2	Q2	Q3	Q4	Q1
VALUE	£ million	8 362	2 905	2 957	3 377	3 404
	% increase on a year earlier	31 [2]	25½	27	24	24½
VOLUME	% increase on a year earlier	9 [3]	10	13½	13	15½
PRICE	% increase on a year earlier	20 [4]	14	12	9½	7½

[1] Source: Overseas Trade Statistics. [2] Aggregated from returns received from 66 companies. [3] If exports of precious stones are excluded the figures become 28½ per cent and 7½ per cent respectively. [4] Average value index. See footnote to table 3.

Table 2 Comparison of latest survey with previous rounds

Percentage increases on a year earlier

	1977 Q2				1977 Q3			1977 Q4	
	S5	S6	S7	S8	S6	S7	S8	S7	S8
VALUE	31	35	29	25½	31½	29	27	24½	24
VOLUME	13	16	11½	10	15½	14	13½	12	13
PRICE	16	16½	15½	14	14	13	12	11	9½

S5 = Fifth survey, November 1976. Provisional results published in *Trade and Industry*, 28 January 1977.
S6 = Sixth survey, January 1977. Provisional results published in *Trade and Industry*, 18 March 1977.
S7 = Seventh survey, April 1977. Provisional results published in *Trade and Industry*, 17 June 1977.
S8 = Eighth survey, July 1977.

Table 3 Companies reported increases in exports compared with actuals [1]

Percentage changes on a year earlier

	Value		Volume		Price [2]	
	EPS	Actual	EPS	Actual	EPS	Actual
1975						
3rd qtr	3½	14	−9½	−7½	13½	23
4th qtr	13	20½	−½	−½	13½	21
1976						
1st qtr	26	25	9½	5	15	19
2nd qtr	27	26½	9	4½	16	21
3rd qtr	34	29	12½	7	19	20½
4th qtr	39½	31½	15	7	20½	22½
1977						
1st qtr	30	30½	9	5½	19	24
2nd qtr	25½	28½	10	7½	14	19½

[1] Recorded OTS less precious stones. [2] The price index is the average value index obtained by dividing the value of exports by the volume figure. This is likely to be closer to the figures given by firms than the unit value index.

On other pages

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Advertisements for 'Trade and Industry'

From 19 September, all advertisement inquiries and bookings should be addressed to our Advertisement Department at 13 Great James Street, London WC1, telephone 01-242 9478.

Companies' rate of return on capital employed 1960 to 1976

This is the third of an annual series of articles [1] bringing together the latest information on various measures of the rate of return on capital employed by companies. The figures shown in tables 1 to 4 all relate to rates of return on capital employed but there are variations between the definitions of the ratios and the sources of data (see table 5) and in the groupings of companies. It is important to note in particular that the figures presented in table 1 and chart 1, based as they are on national accounts data, are derived from a completely different source and are defined differently from those presented in tables 2, 3 and 4 and charts 2, 3 and 4. The figures in tables 2, 3 and 4 are derived from a common source and relate only to large companies listed on the Stock Exchange; the definitions are common for the figures in tables 2 and 3 only.

Some of the estimates published in last year's article have been revised and a further year's estimates have been added. The revisions do not in general change the pattern of the figures over the period covered but serve to emphasise that levels for particular years, especially those for the later years in table 1, should be treated with caution. This year's article also contains some new information which is presented in tables 2 and 3. Table 2 up-dates table 2 of the article in *Economic Trends*, November 1974, 'Estimating companies' rate of return on capital employed' though figures for total manufacturing industry (columns 1, 2 and 3) have featured in the two previous articles in *Trade and Industry* – as columns 7, 8 and 9 of table 1 in each case. Table 3 shows historic and, for the first time, replacement cost rates of return on capital employed for large listed companies in the Department of Industry (DI) analysis of company accounts classified, according to their main activity, to wholesaling and retailing respectively.

These rates of return are on the same definitions as those for manufacturing industry shown in table 2 and have also been prepared by the accountancy staff of the Monopolies and Mergers Commission. It should be noted that the capital employed (at replacement costs) of companies classified to wholesaling and retailing were about 4 per cent and 12 per cent respectively of those classified to manufacturing industry in 1975. The capital employed for wholesaling in that year was smaller than for any of the six industry groups within manufacturing shown in table 2; capital employed for retailing was greater than that for the metal manufacture or the textiles, etc, industry groups.

Rates of return on capital employed after revaluing fixed assets and allowing for depreciation on a replacement cost basis and allowing for stock appreciation (columns 3 and 6 of table 1 and the corresponding columns in tables 2 and 3) are much more meaningful economically than those calculated at historic or book values. However because the latter are still widely used figures on those bases have also been compiled. The differences between the rates of return measured at historic costs (as shown in columns 1 and 4 of table 1 and corresponding columns in tables 2 and 3) and those measured at replacement costs, both in terms of the levels and changes from year to year, reflect the different effects of increases in prices on historic cost and current cost accounts. The gap between the two measures has been noticeably wider over the last four or five years than in the preceeding twelve years.

The latest estimates show that the profitability of industrial and commercial companies in 1976 was little changed from the previous year when measured on a replacement cost basis (table 1, columns 5 and 6 and chart 1, lower two lines). The rate, after providing for i.e. excluding, stock appreciation (column 6), remained below 3½ per cent, an historically very low level. The figures for 1975 and 1976 were well below half the rate for 1970, the low point of the previous cycle. The estimates of rates of return at replacement costs after providing for stock appreciation, as in column 6 and bottom line of chart, also show the long term decline in profitability and the cyclical variation in the figures. It is not clear how far the low figures for 1975 and 1976 reflect an acceleration in the long term decline as opposed to the consequence of a particularly severe depression in the cycle. The same long term decline does not appear in terms of the rates of return at historic costs (column 4 and top line of chart 1). The historic cost figures for the past seven or eight years might suggest that the long term decline had been arrested, even reversed. Similarly, the estimate for 1976 might suggest that a rapid recovery is already underway. But, as indicated above, historic

Chart 1. **Net trading income to net capital stock plus book value of stocks for industrial and commercial companies based on national accounts data**

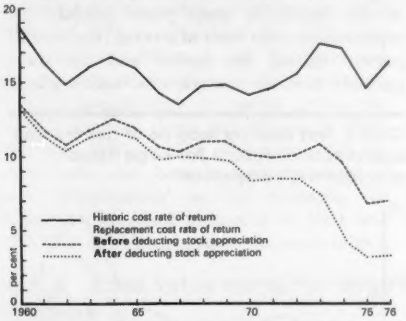

Chart 2. **Net trading income to net trading assets rate of return for large listed manufacturing companies**

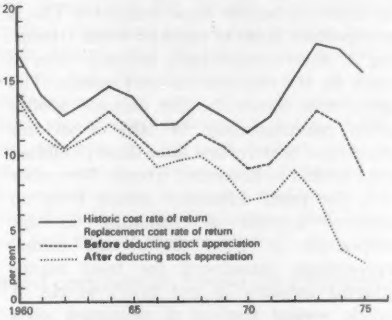

Table 1 **All companies and industrial and commercial companies based on national accounts data**

Per cent

	All companies			Industrial and commercial companies		
		At replacement costs			At replacement costs	
	At historic costs	Before providing for stock appreciation	After providing for stock appreciation	At historic costs	Before providing for stock appreciation	After providing for stock appreciation
	(a) (1)	(b) (2)	(c) (3)	(a) (4)	(b) (5)	(c) (6)
1960	17.5	15.7	12.2	18.8	13.5	13.2
1961	15.3	14.3	10.5	16.4	11.9	11.4
1962	13.8	13.2	9.6	14.9	10.8	10.4
1963	14.9	12.1	10.4	16.0	11.8	11.3
1964	15.2	11.3	10.6	16.7	12.5	11.7
1965	14.5	10.7	10.0	16.0	11.9	11.2
1966	12.7	9.3	8.5	14.3	10.6	9.8
1967	12.0	9.1	8.7	13.5	10.3	10.0
1968	13.0	9.7	8.6	14.7	11.0	9.9
1969	12.9	9.5	8.2	14.8	11.0	9.7
1970	12.2	8.6	6.9	14.1	10.1	8.3
1971	12.8	8.6	7.2	14.6	10.0	8.5
1972	13.2	8.5	6.9	15.5	10.2	8.5
1973	15.0	9.1	5.8	17.6	10.8	7.4
1974	13.7	7.3	2.3	17.3	9.6	4.3
1975	11.1	4.8	1.4	14.6	6.8	3.2
1976	12.5	5.0	1.5	16.3	7.0	3.3

For definitions of rates of return, see lettered references in table 5.

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[1] The first of the annual series appeared in *Trade and Industry*, 24 October 1975, pages 244-7; the second in the issue for 8 October 1976, pages 110-12.

Table 2 Large listed companies in manufacturing industry based on Department of Industry analysis of company accounts

Per cent

Industry group	Total manufacturing industry			Food, drink and tobacco			Chemicals and allied industries			Metal manufacture			Engineering, shipbuilding vehicles and other metal goods			Textiles, leather, clothing and footwear		
	At historic costs	At replacement costs before providing for stock appreciation	At replacement costs after providing for stock appreciation	At historic costs	At replacement costs before providing for stock appreciation	At replacement costs after providing for stock appreciation	At historic costs	At replacement costs before providing for stock appreciation	At replacement costs after providing for stock appreciation	At historic costs	At replacement costs before providing for stock appreciation	At replacement costs after providing for stock appreciation	At historic costs	At replacement costs before providing for stock appreciation	At replacement costs after providing for stock appreciation	At historic costs	At replacement costs before providing for stock appreciation	At replacement costs after providing for stock appreciation
	(d) (1)	(e) (2)	(f) (3)	(d) (4)	(e) (5)	(f) (6)	(d) (7)	(e) (8)	(f) (9)	(d) (10)	(e) (11)	(f) (12)	(d) (13)	(e) (14)	(f) (15)	(d) (16)	(e) (17)	(f) (18)
1960	16.8	14.2	13.7	17.0	13.5	13.7	18.3	14.0	14.0	16.5	13.8	13.6	16.4	14.9	13.9	15.3	12.2	11.6
1961	14.1	11.9	11.4	16.4	13.2	12.8	13.6	10.3	10.5	12.8	10.4	10.1	13.0	11.6	10.5	14.1	11.4	11.6
1962	12.6	10.5	10.3	16.2	13.0	12.7	12.7	9.5	9.8	8.7	6.6	6.6	11.7	10.3	9.6	12.2	10.0	10.0
1963	13.5	11.8	11.1	16.8	13.8	12.3	13.8	11.4	11.4	8.3	6.6	6.2	13.1	12.2	11.8	13.5	11.6	10.0
1964	14.6	12.9	12.0	16.4	13.8	13.1	15.1	12.5	12.5	10.5	8.6	7.3	14.1	13.2	11.5	14.5	12.7	13.2
1965	13.9	12.0	11.0	15.7	13.0	11.9	13.9	11.6	11.6	10.3	8.3	7.3	13.4	12.0	10.1	14.5	12.6	12.0
1966	12.0	10.1	9.2	14.4	11.7	10.5	11.5	9.0	9.0	7.4	5.9	5.2	12.1	10.6	8.8	12.2	10.2	10.2
1967	12.0	10.2	9.6	14.5	12.0	11.4	11.6	9.0	8.3	9.5	7.9	7.0	10.9	9.7	8.8	11.5	9.8	10.2
1968	13.4	11.4	9.9	15.1	12.1	10.3	13.6	11.5	11.2	10.5	9.1	7.9	12.5	11.0	8.9	13.9	12.0	10.2
1969	12.5	10.5	8.7	14.3	11.2	9.8	12.8	10.3	10.0	12.7	10.9	6.2	11.8	10.5	7.4	12.1	10.1	9.4
1970	11.5	9.0	6.8	14.2	10.8	9.0	10.5	7.4	5.7	9.5	7.8	5.9	10.7	8.9	5.3	10.4	8.1	7.2
1971	12.5	9.3	7.2	15.1	11.1	9.3	10.3	6.6	5.2	8.8	6.6	5.9	12.3	9.7	6.6	11.9	8.8	6.9
1972	15.0	11.1	8.9	17.4	12.7	11.0	11.9	7.7	7.0	10.5	7.9	5.6	15.0	11.8	8.9	15.0	11.1	5.1
1973	17.4	12.9	7.1	19.1	13.2	8.1	16.0	11.2	5.4	15.5	12.0	2.5	16.7	13.2	7.1	18.4	13.6	6.4
1974	17.0	12.0	3.5	17.1	11.1	4.0	20.4	14.1	4.7	15.3	11.1	−0.7	15.9	12.1	1.3	15.0	10.6	7.2
1975	15.5	8.5	2.6	18.9	10.5	4.4	16.7	8.3	4.0	11.8	5.5	0.9	14.7	8.9	0.6	9.5	4.5	0.3

For definitions of rates of return, see lettered references in table 5.

cost measures are far less meaningful economically than replacement cost measures and, indeed, in times of continuing high inflation can be seriously misleading.

The rate of return for large listed companies in manufacturing industry obtained from the Department of Industry (DI) analysis of company accounts also indicates a sharp deterioration in the 'real' profitability of British industry since 1972, particularly in 1974 (table 2 column 3 and chart 2, bottom line). The companies included in the DI analysis are not fully representative of manufacturing industry as a whole because they are limited to the larger listed companies operating mainly within the United Kingdom whose main activities are in manufacturing. Because the consolidated accounts of company groups are used in the analysis it is not possible to exclude either overseas operations or activities outside manufacturing. The classification of a company to any particular industry group within manufacturing is necessarily imprecise because many companies' activities are not confined to one industry group and in consequence the figures shown for each of the six industry groups within manufacturing in table 2, and for wholesaling and retailing in table 3, cover also activities outside those industries. This is an important point to consider when attempting to make comparisons between rates of return for the different industry groups. The figures now shown for the industry groups within manufacturing in table 2 of this article have been revised since those published in the article in Economic Trends November 1974, the main difference arising from an improved method of estimating the age composition of fixed assets and annual depreciation, introduced for total manufacturing industry in last year's article. A slightly revised method of estimating stock appreciation has also been adopted (since last year's article), following the proposals in Exposure Draft 18 of the Accounting Standards Steering Committee as prepared by The Inflation Accounting Steering Group. The new method of calculation is also more consistent with the national accounts methodology. These revisions alter slightly the levels of the figures in most years (mainly the replacement costs rates of return); the overall pattern during the period and the comparisons between historic cost and replace-

Chart 3. **Net trading income to net trading assets rate of return for large listed wholesaling companies**

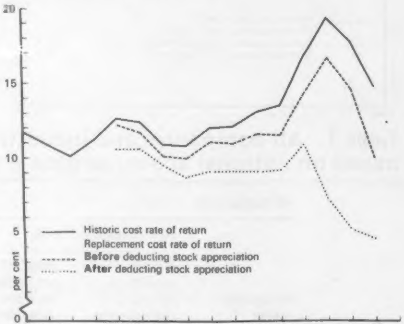

Table 3 Large listed companies in wholesaling and retailing based on Department of Industry analysis of company accounts

Per cent

	Large listed companies in wholesaling			Large listed companies in retailing		
	At historic costs	At replacement costs before providing for stock appreciation	At replacement costs after providing for stock appreciation	At historic costs	At replacement costs before providing for stock appreciation	At replacement costs after providing for stock appreciation
	(d) (1)	(e) (2)	(f) (3)	(d) (4)	(e) (5)	(f) (6)
1960	13.7	..	..	23.0	..	..
1961	12.9	..	..	21.2	..	..
1962	12.1	..	..	21.1	..	..
1963	13.2	..	..	21.3	..	..
1964	14.6	14.2	12.6	20.8	18.8	18.1
1965	14.4	13.7	12.6	20.4	18.4	17.8
1966	12.9	12.1	11.5	19.5	17.8	17.0
1967	12.8	12.0	10.7	19.8	18.1	17.8
1968	14.0	13.1	11.1	20.1	17.8	16.3
1969	14.1	13.0	11.1	19.8	17.0	15.5
1970	15.1	13.6	11.1	20.1	16.9	14.8
1971	15.5	13.6	11.2	22.2	18.5	16.9
1972	18.8	16.4	12.9	26.2	22.2	21.1
1973	21.3	18.7	9.3	24.7	20.8	18.4
1974	19.8	16.6	7.3	21.4	17.1	11.4
1975	16.8	12.0	6.6	21.4	15.4	11.2

For definitions of rates of return, see lettered references in table 5.
.. indicate not available.

Chart 4. **Net trading income to net trading assets rate of return for large listed retailing companies**

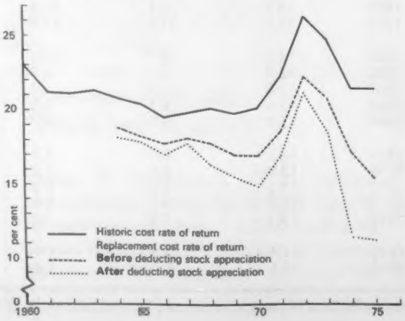

TABLE 2 continued

Per cent

Other manufacturing industries			Industry group
At historic costs	At replacement costs before providing for stock appreciation	At replacement costs after providing for stock appreciation	
(d) (19)	(e) (20)	(f) (21)	
17.3	15.6	14.6	1960
15.8	14.2	14.1	1961
14.3	12.6	12.6	1962
14.8	13.3	13.0	1963
16.6	15.2	14.4	1964
15.0	13.5	13.0	1965
13.0	11.3	10.8	1966
12.8	11.2	10.9	1967
13.8	11.8	10.6	1968
11.9	9.9	8.5	1969
11.4	8.9	7.1	1970
13.0	9.7	7.8	1971
16.3	12.3	10.8	1972
17.9	13.3	9.1	1973
17.0	12.2	4.2	1974
15.0	7.7	3.5	1975

ment cost rates of return have not changed significantly.

The most noticeable features of the figures shown in table 2 are that the rates of return vary cyclically for all the industry groups over the period, though in differing degrees; all the replacement cost rates of return after providing for stock appreciation (columns 3, 6, 9, 12, 15, 18 and 21) show a long-term decline with the peaks and troughs of successive cycles occurring, almost invariably, at lower levels. A large proportion of profits is accounted for by stock appreciation in 1973, 1974 and 1975 (as illustrated by comparing the figures in columns 2 and 3). There are also, less general, instances of the importance of stock appreciation in earlier years, for example for food, drink and tobacco in 1963, 1968 and 1970 to 1972 (columns 5 and 6). There have also been isolated instances of stock 'depreciation' as, for example, for chemicals and allied industries in 1961 and 1962. The six industry groups shown in table 2 reflect the way that large listed companies included in the analysis have been classified, based on the information given in their accounts about the whole range of their activities, and do not therefore represent the balance of activities within the UK manufacturing sector. In terms of the capital employed at replacement costs in 1960 and 1975, each industry group accounted for the following proportions of the figure for all large listed companies classified to manufacturing industry:

Per cent

	1960	1975
Food, drink and tobacco	17	25
Chemicals and allied industries	16	17
Metal manufacture	13	4
Engineering, etc	31	28
Textiles, etc	10	8
Other manufacturing industries	13	18

Table 3 and charts 3 and 4 show rates of return for large listed companies in the DI analysis of company accounts classified to wholesaling and retailing respectively on the same definitions of profits (net trading income) and capital employed (net trading assets) as for manufacturing companies shown in table 2 and chart 2 (see table 5 for definitions). This is the first time that these figures for wholesaling and retailing have been published in this series of articles. The main features of these figures compared to those for manufacturing companies in table 2 (columns 1, 2 and 3) and chart 2 are that they display less pronounced but broadly simultaneous cyclical variations and a less evident long-term decline, but the wider gap between historic cost rates (columns 1 and 4) and replacement cost rates after providing for stock appreciation (columns 3 and 6) ie the gap between the top and bottom lines of charts 3 and 4, in recent years compared to the earlier years is just as evident as for manufacturing (table 2 columns 1 and 3 and top and bottom lines of chart 2). It is also noticeable that the level of profitability for retailing has been consistently higher than for wholesaling though the gap narrowed appreciably in 1973/74, and previously, less appreciably, in the late 1960s. The figures for wholesaling have been much closer to, though generally higher than, those for manufacturing with some divergence in the late 1960s, though the gap narrowed again in later years. It is important, however, not to attach too much weight to precise differences in levels either between different sectors or for particular years. The coverage of the figures shown in tables 2 and 3 (and 4) is restricted to large listed companies only. The rates of return must also to some extent reflect the differing structures within manufacturing, wholesaling and retailing, for example, the need to carry different levels of stocks for different activities and the need for different capital equipment, both in terms of cost and quantity, in terms of overall capital employed. Buildings, which are depreciated over a longer period than other fixed assets, and land are a greater proportion of total fixed assets for retailers than for wholesalers or manufacturers. One consequence of this seems to be that annual depreciation (at historic and replacement costs) accounts for a lower proportion of retailers' profits than it does for wholesalers and considerably less so than it does for manufacturers. Also stock appreciation, or stock profits, accounts for a much higher proportion of manufacturers' and wholesalers' profits than of retailers' profits.

Table 4 shows the book value ratios derived directly from the results of the DI analysis of large listed companies' published accounts. The results of the analysis are published annually in detail in Business Monitor M3 – Company Finance and, in aggregate, in Financial Statistics each month. These book value ratios are prepared, as explained earlier, largely because they are still widely used and because they reflect the valuations of fixed assets and depreciation which companies enter in their published, annual accounts. How-

Table 4 Book value ratios for large listed companies based on Department of Industry analysis of company accounts

Per cent

	Large listed companies in manufacturing industry				Large listed companies in manufacturing, distribution and certain other services			
			Net income after all interest charges/shareholders' interest				Net income after all interest charges/shareholders' interest	
	Gross income/ gross assets	Net income/ net assets	Before tax	After tax	Gross income/ gross assets	Net income/ net assets	Before tax	After tax
	(g) (1)	(h) (2)	(i) (3)	(j) (4)	(g) (5)	(h) (6)	(i) (7)	(j) (8)
1960	15.7	15.7	18.3	10.0	15.9	16.0	18.5	10.2
1961	13.9	13.4	15.5	8.4	14.3	13.9	16.1	8.7
1962	12.8	12.1	13.8	7.5	13.3	12.7	14.6	7.9
1963	13.4	12.9	14.8	8.0	13.9	13.5	15.5	8.5
1964	14.4	14.2	16.6	9.2	14.9	14.7	17.2	9.5
1965	13.8	13.4	15.6	10.1	14.2	13.9	16.1	10.4
1966	12.5	11.8	13.7	6.4	13.0	12.3	14.3	6.7
1967	12.5	11.9	14.1	7.4	13.0	12.4	14.8	7.6
1968	13.9	13.7	16.7	8.7	14.4	14.2	17.2	8.8
1969	13.6	13.3	16.0	8.1	14.3	14.1	16.4	8.4
1970	12.6	12.1	14.5	7.8	13.5	13.1	15.8	8.4
1971	13.4	13.1	15.7	9.1	14.3	14.0	17.0	9.6
1972	15.1	15.4	18.9	12.1	16.1	16.4	20.4	13.1
1973	16.8	17.7	21.5	13.8	17.4	18.0	22.2	14.1
1974	16.0	16.5	20.0	13.7	16.2	16.3	19.8	13.4
1975	14.7	14.6	17.0	11.6	15.2	14.8	17.3	11.8
1976 p	16.9	17.3	..	..	17.3	17.5	..	..

Based on book values of depreciation and assets as recorded in company accounts; these have not been adjusted to take account of the treatment of investment grants and building grants.
For definitions of ratios, see lettered references in table 5.
p Preliminary estimates.

Table 5 Definition of historic and replacement costs rates of return given in tables 1, 2 and 3 and book value ratios given in table 4

Profits	Capital employed	Sources of data
Table 1 Based on national accounts data		
(a) Net trading income at historic costs (gross trading profits *plus* rent received by these companies *less* capital consumption at historic costs).	Net capital stock (fixed assets other than land) of these companies at historic costs *plus* book value of stocks.	National Income and Expenditure 'Blue Book' and Central Statistical Office
(b) Net trading income at replacement costs before providing for stock appreciation (gross trading profit *plus* rent received by these companies *less* capital consumption at replacement costs).	Net capital stock (fixed assets other than land) of these companies at replacement costs *plus* book value of stocks.	
(c) Net trading income at replacement costs after providing for stock appreciation (gross trading profits *plus* rent received by these companies *less* capital consumption at replacement costs and *less* stock appreciation).	Net capital stock (fixed assets other than land) of these companies at replacement costs *plus* book value of stocks.	
Tables 2 and 3 Based on company accounts data from DI analysis of company accounts		
(d) Net trading income before interest at historic costs (gross trading income *less* depreciation at historic costs).	Net trading assets at historic costs (tangible net fixed assets at historic costs *plus* net current assets other than investments, bank overdrafts and loans, dividend provisions and corporation tax payable in next fiscal year).	Monopolies and Mergers Commission Accountancy Staff
(e) Net trading income before interest at replacement costs (gross trading income *less* depreciation at replacement costs).	Net trading assets at replacement costs (tangible net fixed assets at replacement costs *plus* net current assets other than investments, bank overdrafts and loans, dividend provisions and corporation tax payable in next fiscal year).	
(f) Net trading income before interest at replacement costs *less* stock appreciation.	Net trading assets at replacement costs.	
Table 4 From DI analysis of company accounts before tax		
before tax		
(g) Gross income *less* short-term interest.	Gross assets at book values (fixed and intangible assets before deduction of accumulated depreciation *plus* current assets and investments *less* current liabilities including bank overdrafts and loans, dividend provisions and, after 1967, corporation tax payable in next fiscal year).	Business Monitor, *M 3, Company Finance* (annual) and *Financial Statistics* (monthly)
(h) Net income (gross income *less* short-term interest and depreciation at book values).	Gross assets at book values as in (g) *less* accumulated depreciation.	
(i) Net income *less* all interest payments (gross income *less* all interest payments and depreciation at book values).	Shareholders' interest (ordinary and preference shares *plus* capital, revenue and deferred tax reserves *plus* dividends outstanding at the end of the year *plus* minority interests and *less* goodwill and intangible assets).	
After tax		
(j) Net income *less* all interest payments, *less* company tax charge other than deferred tax, *less* income tax payable on ordinary and preference dividends, *plus* those investment grants separately distinguished in company accounts.	Shareholders' interest.	

ever, for the reasons already mentioned it is felt that they are far less useful economically than the inflation adjusted rates of return ie the rates of return on capital employed at replacement costs before and, particularly, after providing for stock appreciation, as given in tables 1, 2 and 3. Nevertheless they are, currently, the most accessible ratios and it is interesting to note that the net income to net assets ratio for large listed companies in manufacturing industry (table 4 column 2) follows almost exactly the same path as the rate of return at historic costs shown in column 1 of table 2. On this basis the provisional 1976 figure shown in table 4 (based on the accounts of almost half the companies to be covered by the analysis) would suggest a sharp up-turn in the historic costs rate of return for manufacturing industry. However, as already mentioned and as can be seen from a comparison of the 1975 and 1976 figures in columns 4 and 6 of table 1, even a sharp rise in the historic costs rate is unlikely to have lead to an appreciable increase in real profitability for 1976.

The detailed definitions of the rates of return in tables 1 to 4 are set out in table 5. There are a number of problems, mainly of definition, in calculating these rates of return; these are discussed fully in the article in the November 1974 *Economic Trends*. This note and the *Economic Trends* article deal only with accounting rates of return. These measure the return achieved in a particular year on total capital employed on all projects then in existence, including both those projects started at various times in the past and those starting during the current year. The note does not cover 'internal' rates of return which measure the return on an individual project based on the net receipts from the project over its whole life.

There are a number of different measures of rates of return, depending upon the definition of profits and capital employed, to meet different purposes. For economic analysis it is best to relate trading income to trading assets, and to exclude non-trading activities. For questions relating to the total availability and use of funds the more appropriate rate is of total income to total capital employed. It is desirable to relate income to capital employed including short-term loans, rather than to only long-term capital, because much short-term capital, eg bank overdrafts, is renewed each year. There are advantages in using rates based on assets both gross and net of depreciation but for companies in aggregate the results generally do not differ sufficiently to outweigh the convenience of using only net assets, since such net rates are widely used and accepted.

For a measure of the return on risk capital the appropriate rate is profits after depreciation and interest payments but before tax to the shareholders' interest. The simplest way of measuring post-tax rates of return is to express post-tax profits as a ratio of the shareholders' interest, but these post-tax rates involve more approximations than pre-tax rates and added caution is needed in interpreting them, particularly in the short run. Longer-term comparisons of post-tax rates of return are probably better and less subject to irregular variation.

Table 2 of last year's article showed the national accounts estimates of capital consumption and net capital stock for financial companies and industrial companies, at both current replacement and historic costs. These figures have not been reproduced in this article but the replacement cost figures for 1966 to 1976 can be found in tables 11.9 and 11.11, of the recently published National Income and Expenditure 1966-1976 'Blue Book'. The historic cost figures up to 1975 are as in last year's article. The corresponding 1976 figures are as below:

	Capital consumption (£ million)	Net capital stock (£ '000 million)
All companies	2 706	57.2
Financial companies	224	6.1
Industrial and commercial companies	2 482	51.1

Inquiries: Home Financial Statistics (Room 241c), Economics and Statistics Division 6a, Departments of Industry, Trade and Prices and Consumer Protection, 1 Victoria Street, London SW1H 0ET (tel. 01-215 3132).

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Self-service in grocery shops

Advance figures on self-service grocery shops, from the supplement to the main report on the census of distribution for 1971, are given in this article. An earlier article from the supplement, on mail order trading, was published in *Trade and Industry*, 10 June 1977.

The supplement, due to be published next month, will contain more detailed analyses by size of selling space and number of checkouts. Other tables in the supplement will deal with floorspace, automatic vending machine sales, credit sales and book debts, department stores, credit and check traders, single-shop businesses, mobile shops, central offices, enterprises, commodity analysis of turnover, voluntary group membership and transport costs. The principal results of the census were published in 13 parts from May 1975 to November 1976.

For the 1971 census self-service was defined as an arrangement where the customer collects the goods required and pays for them at a check-out point. Retailers were asked to report whether each shop was operated wholly on a self-service basis or whether food was sold by self-service in part of the shop (for example, in a food hall in a department store). Shops in which a few items (for example, meat, cigarettes, wines and spirits) were served by shop assistants or at the check-outs were treated as wholly self-service.

Table 1 shows that in 1971 about 25 per cent of all grocery shops in Great Britain were operated wholly or partly on self-service lines and that their share of the trade had reached 65 per cent of the total. Although the number of grocery self-service shops had increased from an estimate of nearly 19 300 in 1966 to a recorded total of some 25 900 in 1971 the census reports for the two years show a fall in the total number of all grocery shops from more than 130 000 to over 105 000. Over the period covered by the table the trend towards self-service was reflected generally throughout Great Britain and by co-operative societies, multiple retailers and independent traders alike. In what appears to have been a general catching-up process there were quite marked variations from one part of the country to another with Scotland and Wales showing the largest changes. Only among co-operative societies in the North Region and independents in Greater London were actual falls recorded in both numbers of self-service grocery shops and their turnover in relation to 1966.

Table 2 shows that turnover per person

Table 1 Self-service grocery shops by form of organisation: Great Britain, Scotland, Wales, England and the standard regions: 1966, 1971

				Self-service grocery shops								
		All grocery shops		Total			Co-operative societies		Multiples		Independents	
		Shops	Turnover	Shops	Turnover	Turnover as a percentage of all grocery shops	Shops	Turnover	Shops	Turnover	Shops	Turnover
		Number	£'000	Number	£'000	%	Number	£'000	Number	£'000	Number	£'000
GREAT BRITAIN	**1971**	**105 283**	**4 156 487**	**25 897**	**2 696 421**	**64.9**	**6 330**	**508 045**	**8 315**	**1 712 019**	**11 252**	**476 358**
	1966	**130 355**	**3 020 964**	**19 279**	**1 356 646**	**44.9**	**5 360**	**299 490**	**6 348**	**778 430**	**7 571**	**278 726**
Scotland	**1971**	**10 426**	**412 549**	**2 621**	**248 625**	**60.3**	**1 085**	**80 831**	**817**	**130 035**	**719**	**37 759**
	1966	**12 805**	**311 161**	**1 561**	**103 450**	**33.2**	**707**	**42 581**	**571**	**49 902**	**283**	**10 968**
Wales	**1971**	**7 840**	**225 005**	**1 374**	**122 672**	**54.5**	**358**	**25 895**	**477**	**74 427**	**539**	**22 350**
	1966	**10 352**	**162 951**	**638**	**41 887**	**25.7**	**291**	**14 526**	**201**	**21 434**	**146**	**5 926**
England	**1971**	**87 017**	**3 518 934**	**21 902**	**2 325 124**	**66.1**	**4 887**	**401 319**	**7 021**	**1 507 557**	**9 994**	**416 248**
	1966	**107 198**	**2 546 853**	**17 082**	**1 211 310**	**47.6**	**4 362**	**242 385**	**5 576**	**707 090**	**7 144**	**261 834**
North	1971	6 968	250 691	1 648	155 435	62.0	423	27 217	579	101 807	646	26 411
	1966	8 238	183 140	1 556	102 240	55.8	571	31 653	668	58 038	317	12 548
Yorkshire and Humberside	1971	10 746	352 494	2 126	210 638	59.8	648	41 951	636	125 497	842	43 190
	1966	13 277	259 377	1 695	94 186	36.3	518	20 295	432	40 920	745	32 969
East Midlands	1971	7 745	256 678	1 749	149 596	58.3	576	39 230	363	71 956	810	38 410
	1966	9 060	194 768	1 215	79 825	41.0	492	27 059	209	33 938	514	18 827
East Anglia	1971	3 786	136 282	973	85 895	63.0	202	19 441	201	44 686	570	21 767
	1966	4 488	97 367	564	37 725	38.7	146	10 132	156	20 144	262	7 451
South East	1971	23 853	1 374 393	7 876	1 018 285	74.1	1 207	125 393	3 140	754 839	3 529	138 053
	1966	26 795	955 849	6 634	556 719	58.2	1 018	68 155	2 642	380 009	2 974	108 556
Greater London	1971	8 904	570 549	2 966	419 813	73.6	465	52 538	1 457	323 913	1 044	43 362
	1966	10 113	413 287	3 039	250 072	60.5	395	29 478	1 405	175 614	1 239	44 981
Remainder	1971	14 949	803 844	4 910	598 471	74.4	742	72 855	1 683	430 925	2 485	94 691
	1966	16 682	542 562	3 595	306 647	56.5	623	38 677	1 237	204 395	1 735	63 575
South West	1971	8 376	300 522	2 191	191 184	63.6	384	31 035	561	114 923	1 246	45 225
	1966	9 283	202 539	1 251	87 617	43.3	363	17 292	331	45 815	557	24 510
West Midlands	1971	10 063	369 821	2 284	235 643	63.7	536	44 673	683	143 939	1 065	47 031
	1966	11 924	246 731	1 560	106 452	43.1	476	30 283	412	54 494	672	21 675
North West	1971	15 480	478 053	3 055	278 450	58.2	911	72 380	858	149 910	1 286	56 161
	1966	24 133	407 082	2 607	146 546	36.0	778	37 516	726	73 732	1 103	35 298

Table 2 Self-service compared with other grocery shops by form of organisation and amount of turnover, 1971

	All shops			Self-service shops						
						Persons engaged				
							Normal hours worked in week			
Form of organisation and amount of turnover	Shops	Turnover	Persons engaged	Shops	Turnover	Total	Over 30	Over 8 and up to 30	Not more than 8	Turnover per person engaged[1]
	Number	£'000	Number	Number	£'000	Number	Number	Number	Number	£
ALL GROCERY SHOPS	105 283	4 156 487	542 676	25 897	2 696 421	288 532	172 990	85 923	29 619	11 685
Shops with turnover of										
under £10 000	27 968	172 366	51 718	997	6 338	2 875	1 876	688	311	2 668
£10 000 and under £20 000	29 954	438 385	83 564	2 636	40 701	8 292	5 034	2 054	1 204	6 109
£20 000 and under £50 000	31 671	960 564	144 122	9 642	324 246	45 365	25 615	14 242	5 508	9 136
£50 000 and under £100 000	9 050	614 124	71 405	6 408	445 312	49 734	31 030	14 423	4 281	11 027
£100 000 and under £200 000	3 642	500 774	53 310	3 345	461 970	48 961	31 425	13 448	4 088	11 494
£200 000 and under £500 000	2 198	675 743	68 870	2 088	643 251	65 359	40 162	18 130	7 067	12 192
£500 000 and over	800	794 531	69 687	781	774 602	67 946	37 848	22 938	7 160	14 644
Co-operative societies	7 745	549 943	56 377	6 330	508 045	51 305	34 393	13 808	3 104	11 857
Shops with turnover of										
under £10 000	332	1 891	868	162	905	465	341	112	12	2 245
£10 000 and under £20 000	564	8 873	1 427	236	3 738	686	509	152	25	6 257
£20 000 and under £50 000	2 930	101 550	11 359	2 168	78 643	8 765	6 231	2 134	400	10 488
£50 000 and under £100 000	2 444	171 272	17 500	2 317	162 970	16 551	11 401	4 258	892	11 661
£100 000 and under £200 000	1 092	146 951	14 289	1 071	144 329	14 058	9 386	3 843	829	12 313
£200 000 and under £500 000	351	97 439	9 068	344	95 493	8 914	5 423	2 697	794	13 321
£500 000 and over	32	21 966	1 866	32	21 966	1 866	1 102	612	152	14 802
Multiples	10 973	1 841 889	194 057	8 315	1 712 019	175 546	104 381	52 800	18 365	12 232
Shops with turnover of										
under £10 000	489	2 566	1 985	114	705	700	483	185	32	1 191
£10 000 and under £20 000	748	11 227	2 870	297	4 550	1 374	916	342	116	3 973
£20 000 and under £50 000	2 690	94 426	14 323	1 563	56 842	8 643	5 182	2 685	776	8 223
£50 000 and under £100 000	2 714	191 452	22 843	2 205	157 412	18 544	11 474	5 354	1 716	10 488
£100 000 and under £200 000	1 914	270 115	30 357	1 795	254 496	28 471	18 189	7 596	2 686	10 909
£200 000 and under £500 000	1 690	532 918	55 961	1 626	513 539	53 573	32 698	14 761	6 114	11 905
£500 000 and over	728	739 185	65 718	715	724 475	64 241	35 439	21 877	6 925	14 536
Independents	86 565	1 764 655	292 242	11 252	476 358	61 681	34 216	19 315	8 150	9 935
Shops with turnover of										
under £10 000	27 147	167 909	48 865	721	4 729	1 710	1 052	391	267	3 425
£10 000 and under £20 000	28 642	418 285	79 267	2 103	32 413	6 232	3 609	1 560	1 063	6 587
£20 000 and under £50 000	26 051	764,587	118 440	5 911	188 761	27 957	14 202	9 423	4 332	8 955
£50 000 and under £100 000	3 892	251 400	31 062	1 886	124 930	14 639	8 155	4 811	1 673	10 962
£100 000 and under £200 000	636	83 708	8 664	479	63 144	6 432	3 850	2 009	573	12 282
£200 000 and under £500 000	157	45 386	3 841	118	34 219	2 872	2 041	672	159	13 930
£500 000 and over	40	33 380	2 103	34	28 161	1 839	1 307	449	83	17 903

[1] In calculating this ratio all persons working for 30 hours a week or less have, in this table, been counted as 0.5.

Table 2 continued

	Other shops						
			Persons engaged				
				Normal hours worked in week			
Form of organisation and amount of turnover	Shops	Turnover	Total	Over 30	Over 8 and up to 30	Not more than 8	Turnover per person engaged[1]
	Number	£'000	Number	Number	Number	Number	£
ALL GROCERY SHOPS	79 386	1 460 066	254 144	154 060	66 332	33 752	7 154
Shops with turnover of							
under £10 000	26 971	166 027	48 843	33 940	8 891	6 012	4 011
£10 000 and under £20 000	27 318	397 684	75 272	45 267	18 482	11 523	6 598
£20 000 and under £50 000	22 029	636 318	98 757	55 763	29 328	13 666	8 236
£50 000 and under £100 000	2 642	168 812	21 671	12 782	6 732	2 157	9 800
£100 000 and under £200 000	297	38 804	4 349	2 981	1 107	261	10 588
£200 000 and under £500 000	110	32 493	3 511	2 180	1 267	64	11 419
£500 000 and over	19	19 929	1 741	1 147	525	69	13 801
Co-operative societies	1 415	41 899	5 072	3 810	1 087	175	9 435
Shops with turnover of							
under £10 000	170	986	403	287	112	4	2 859
£10 000 and under £20 000	328	5 135	741	559	161	21	7 899
£20 000 and under £50 000	762	22 908	2 594	1 997	498	99	9 979
£50 000 and under £100 000	127	8 302	949	684	226	39	10 168
£100 000 and under £200 000	21	2 621	231	187	42	2	12 542
£200 000 and under £500 000	7	1 947	154	96	48	10	15 572
£500 000 and over	—	—	—	—	—	—	—
Multiples	2 658	129 870	18 511	11 244	5 690	1 577	8 729
Shops with turnover of							
under £10 000	375	1 861	1 285	754	407	124	1 826
£10 000 and under £20 000	451	6 677	1 496	947	425	124	5 467
£20 000 and under £50 000	1 127	37 584	5 680	3 383	1 657	640	8 294
£50 000 and under £100 000	509	34 040	4 299	2 593	1 250	456	9 878
£100 000 and under £200 000	119	15 618	1 886	1 288	462	136	9 841
£200 000 and under £500 000	64	19 379	2 388	1 329	1 021	38	10 427
£500 000 and over	13	14 710	1 477	950	468	59	12 122
Independents	75 313	1 288 297	230 561	139 006	59 555	32 000	6 972
Shops with turnover of							
under £10 000	26 426	163 180	47 155	32 899	8 372	5 884	4 077
£10 000 and under £20 000	26 539	385 872	73 035	43 761	17 896	11 378	6 608
£20 000 and under £50 000	20 140	575 826	90 483	50 383	27 173	12 927	8 176
£50 000 and under £100 000	2 006	126 470	16 423	9 505	5 256	1 662	9 755
£100 000 and under £200 000	157	20 564	2 232	1 506	603	123	11 003
£200 000 and under £500 000	39	11 167	969	755	198	16	12 955
£500 000 and over	6	5 219	264	197	57	10	22 641

[1] In calculating this ratio all persons working for 30 hours a week or less have, in this table, been counted as 0.5.

engaged in 1971 was usually higher in self-service than in other grocery shops, the main exception being in the smaller shops with sales of less than £20,000 a year. In making such comparisons account needs to be taken of the relationship between the numbers of persons working full-time and part-time and also between the two categories of part-time workers. In table 2 the figures of turnover per person engaged have been calculated by counting all persons working more than 30 hours a week as one and those working 30 hours a week or less as half: this is in line with the corresponding table 19 for 1966 given at pages 112/113 of volume 2 of the census of distribution report for that year.

Table 3 draws upon the estimates given in the section dealing with self-service in volume 2 of the 1966 census report in order to provide comparable figures for 1966 and 1971 of turnover, stocks and gross margin of multiple and independent grocery organisations in relation to the type of service offered.

The supplement to the report on the census of distribution for 1971 will be published by HMSO as Business Monitor SD 23, price £5.25.

Inquiries about the census of distribution for 1971 should be addressed to the Business Statistics Office, Cardiff Road, Newport, Gwent, NPT 1XG, tel. Newport (0633) 56111 ext. 2000.

Table 3 on next page

The seasonally adjusted series include, where appropriate, adjustments for the timing of holidays (including the extra Jubilee bank holiday) and adjustments to make allowance for the inclusion of an extra week in the January 1975 trading period. No adjustments are made to the non-seasonally adjusted data.

The final figures for August will be published in a press notice on Monday, 3 October 1977.

Inquiries: 01-215 3705.

Table 3 Grocers and provision dealers by form of organisation and type of service: 1966, 1971

			Establishments			Stocks		Gross margin	
Form of organisation and type of service		Organisations	All	Self-service	Turnover	End of year	Turnover divided by end-year stocks	Amount	As a percentage of turnover
		Number	Number	Number	£'000	£'000	Ratio	£'000	%
ALL FORMS OF ORGANISATION OTHER THAN CO-OPERATIVE SOCIETIES	**1971**	**82 666**	**97 747**	**19 115**	**3 614 982**	**261 822**	**13.8**	**719 073**	**19.9**
	1966	**—**	**116 450**	**13 348**	**2 512 557**	**165 310**	**15.2**	**402 899**	**16.0**
Multiples	**1971**	**135**	**10 760**	**8 007**	**1 852 598**	**147 469**	**12.6**	**364 389**	**19.7**
	1966	**187**	**13 031**	**5 777**	**1 033 223**	**71 575**	**14.4**	**184 108**	**17.8**
With self-service	1971	114	10 324	8 007	1 838 565	145 474	12.6	360 548	19.6
	1966	125	11 333	5 777	978 454	67 033	14.6	171 406	17.5
In all their branches	1971	48	1 297	1 297	263 354	17 745	14.8	46 493	17.7
	1966	11	619	619	85 856	6 682	12.8	15 259	17.8
In half or more but not all their branches	1971	56	8 314	6 540	1 475 471	119 960	12.3	297 159	20.1
	1966	52	4 797	3 363	509 551	35 142	14.5	87 986	17.3
In less than half their branches	1971	10	713	170	99 740	7 768	12.8	16 896	16.9
	1966	62	5 917	1 795	383 047	25 209	15 2	68 161	17.8
Without self-service	1971	21	436	—	14 033	1 996	7.0	3 841	27.4
	1966	62	1 698	—	54 769	4 542	12.1	12 702	23.2
Independents	**1971**	**82 531**	**86 987**	**11 108**	**1 762 384**	**114 353**	**15.4**	**354 684**	**20.1**
	1966	**—**	**103 419**	**7 571**	**1 479 334**	**93 735**	**15.8**	**218 791**	**14.8**
With self-service	1971	10 192	11 714	11 108	489 429	31 735	15.4	91 419	18.7
	1966	—	7 586	7 571	278 725	16 166	17.2	39 534	14.2
Without self-service	1971	72 339	75 273	—	1 272 955	82 618	15.4	263 265	20.7
	1966	—	95 833	—	1 200 609	77 569	15.5	179 257	14.9

Retail sales: provisional estimate for August

Volume

The provisional estimate of the seasonally adjusted index of the volume of retail sales in August is 107 (1971 = 100), the same as in July.

The estimate suggests that the increased trade in July, which followed lower levels in earlier months, has been maintained.

Due to increased trade in July and August the volume of sales in the three months June to August was 2 per cent higher than in the previous three months. However, the average level of trade during the first eight months of 1977 was still about 3 per cent below the annual average for 1976.

Retail sales: volume and value

	Volume seasonally adjusted index (1971 = 100)		Value not seasonally adjusted – percentage change compared with a year earlier
1976		**1976**	
1st qtr	107.3	1st qtr	+15
2nd	107.6	2nd	+12
3rd	108.9	3rd	+15
4th	108.5	4th	+16
1977		**1977**	
1st qtr	105.0	1st qtr	+14
2nd	103.9	2nd	+13
1976		**1976**	
May	106.8	May	+16
June	107.3	June	+13
July	108.8	July	+14
Aug	108.9	Aug	+17
1977			
May	104.4	May	+14
June	103.8	June	+14
July	107.0	July	+16
Aug	107 p	Aug	+15 p

Value

Based on non-seasonally adjusted data, the provisional estimate of the value of total retail sales in August was 15 per cent higher than in August 1976. In the first eight months of 1977, the average value of sales was 14 per cent higher than in the corresponding period of 1976.

Notes

The volume index is given to the nearest half per cent. The percentage increase in value compared with a year earlier is given to the nearest whole number.

Estimates are based on early returns to the monthly inquiry. These returns cover approaching one half, by turnover, of information available at the final stage. Past evidence suggests that the average error (ignoring sign) in the provisional estimates will be about 0.5 per cent. However, as with all estimates based on partial data, caution must be exercised in interpreting a single month's figures.

When using the volume figures, it should be borne in mind that, when price increases are large, the various problems associated with revaluation of the value series to constant prices become more acute. Thus, the relative accuracy with which volume changes have been measured is likely to have been reduced in recent periods.

The value estimates are compiled inclusive of VAT, and will, therefore, reflect changes in the rates of VAT. The volume estimates, however, are not affected by these changes since the retail price indices used to 'deflate' the value data are themselves inclusive of VAT.

Vehicle production: provisional estimates for August

Provisional estimates of vehicle production in the United Kingdom in the four weeks ending 27 August 1977 are shown below. More detailed production figures are due to be published on 22 September.

Inquiries: 01-212 0788.

Thousands

		Passenger cars		Commercial vehicles	
	No. of weeks	Recorded	seasonally adjusted (monthly average)	Recorded	seasonally adjusted (monthly average)
1975	52	1 268	106	380.7	31.7
1976	53	1 333	111	372.1	31.0
1976					
Aug	4	65	82	18.1	27.3
Sep	5	98	106	32.0	30.7
Oct	5	141	111	39.3	30.9
Nov	4	120	112	33.6	33.6
Dec	5	110	99	31.7	27.4
1977					
Jan	4	115	119	33.4	37.5
Feb	4	91	95	32.4	34.0
Mar	5	112	93	41.0	34.9
Apr	4	106	126	28.3	31.0
May	4	134	124	37.6	35.4
Jun	5	109	95	32.6	28.2
Jul	4	73	103	26.4	33.2
Aug	4	76	96	23.9	35.3
Mar-May 1977			114		33.8
Jun-Aug 1977			98		32.2
Percentage change			−14		−5

Industrial news pictures

Pictures are published in *Trade and Industry* each week showing developments in British industry. If your company has introduced an interesting new product, if you have received an award, if you have developed a novel manufacturing process, if you have produced the biggest or smallest or heaviest or (you feel) the best designed product, you are welcome to send us a photograph with a short news story.

Contributions should be sent promptly – while the subject is still newsworthy – to the Editor, *Trade and Industry*, Room 439, 1 Victoria Street, London SW1H 0ET.

New companies registered in Northern Ireland in July

New companies registered in Northern Ireland in July are as follows:

	July 1977	January to July 1977	July 1976
Public companies limited by shares	—	—	—
Private companies limited by shares	50	456	55
Private unlimited companies	—	—	—
Public companies limited by guarantee not having a share capital	—	7	—
Private companies limited by guarantee not having a share capital	—	2	—
Private companies limited by guarantee having a share capital	—	—	—
Total nominal capital of companies incorporated	£1 692 300	£18 185 604	£1 432 410

Registrations of British, community and foreign films

The following are details of films registered by the Department of Trade under the Films Acts 1960 to 1970, as amended by the European Communities Act 1972, during the week ended Friday, 9 September 1977.

BR/E indicates that the film is a British quota film, EC that the film is a quota film. The date which forms part of the registration number of each is the date on which quota life of the film expires.

Title of film	Registered no.	Playing time minutes	Date of registration	Registered in the name of	Maker's name
BRITISH					
Dear Marjorie Boobs	BR/E 39298/11/9/82	5	7 September	New Realm Distributors Ltd	Oppidan (UK) Ltd
Movietone News 2518	BR/E 39185/11/9/82	8	9 September	British Movietonews Ltd	British Movietonews Ltd
COMMUNITY					
Naked Exorcism	EC 39297/11/9/82	88	7 September	Mark Associates Ltd	Ditta Luigi Fedeli, Rome
FOREIGN					
Slap Shot	F 39296	124	7 September	Cinema International Corporation (UK)	Universal Pictures, California
Annie Hall	F 39299	93	7 September	United Artists Corporation Ltd	Heywood Productions Inc and Hillary Productions Inc, New York
The Island Of Dr Moreau	F 39300	98	7 September	Brent Walker Film Distributors Ltd	American International Productions, California
Gone In 60 Seconds	F 39301	98	7 September	Brent Walker Film Distributors Ltd	H. B. Walicki Productions, California

Cinema admissions and takings in June 1977

During June, counted as a five-week period, the weekly average of admissions to cinemas in Great Britain was 1.61 million and the weekly average of gross box office takings was £1.36 million. The comparable figures for June 1976 were 1.62 million and £1.21 million.

Index to statistics published regularly in 'Trade and Industry'

(a) annually (m) monthly (q) quarterly

Air transport: trade by air (a)	1 Jul 77
Balance of payments	
current account (m)	19 Aug 77
overseas royalties	12 Aug 77
trends in invisibles	29 Apr 77
see also Overseas trade of the UK	
Business names and limited partnerships (a)	18 Feb 77
Capital expenditure: manufacturing, distributive and service industries (q)	2 Sept 77
by regions	18 Feb 77
Catering trades turnover (q)	26 Aug 77
Census of production (a)	28 Jan 77
Check trading (a)	12 Aug 77
Chemicals industry activity (q)	1 Jul 77
Companies	
acquisitions and mergers (q)	12 Aug 77
insolvencies (q)	5 Aug 77
liquidity (q)	9 Sept 77
new registrations:	
Gt. Britain (m)	26 Aug 77
N. Ireland (m)	This week
rate of return on capital (a)	This week
structure of company financing	4 Feb 77
Construction work overseas (a)	15 Oct 76
EEC economic indicators *see* Foreign trade	
Energy trends (m)	2 Sept 77
Engineering industries:	
production indices (m)	
sales and orders (m)	19 Aug 77
Film industry	
British Film Fund Agency returns (m)	9 Sept 77
cinema admissions and takings (m)	This week
exhibitors' quota returns (a)	6 May 77
overseas payments and earnings (a)	26 Aug 77
registrations of films (a)	4 Feb 77
Food	
consumption levels (6m)	25 Mar 77
household consumption (q)	1 Jul 77
Footwear industry: production, orders and deliveries (m)	26 Aug 77
Foreign trade: industrial countries' economic indicators (m)	2 Sept 77
quarterly analysis (q)	2 Sept 77
see also Overseas trade of the UK	
Hire purchase business (m)	9 Sept 77
Industrial production	
index numbers (m)	19 Aug 77
Scotland (q)	9 Sept 77
Wales (q)	29 Jul 77
Insurance companies: investments and assets (a)	20 Aug 76
Investment	
book values of overseas direct investments (every 3 years)	25 Feb 77
industry's investment intentions (3 times a year)	10 Jun 77
investment and earnings overseas (a)	5 Aug 77
Made-up clothing: orders and deliveries (m)	26 Aug 77
Man-made fibres	
deliveries (q)	10 Jun 77
production (m)	12 Aug 77
production: quarterly analysis (q)	10 Jun 77
Metal-working machine tools (m)	5 Aug 77
Motor industry	
car and commercial vehicle production (m)	2 Sept 77
estimated figures (m)	This week
motor trade turnover (q)	26 Aug 77
Office development permits (q)	2 Sept 77
Official reserves (m)	9 Sept 77
Overseas trade of the UK	
direct exporters and credit terms (a)	12 Aug 77
analysis of trends (q)	2 Sept 77
backrun (a)	11 Mar 77
export prospects (q)	This week
invoicing in foreign currencies	22 Apr 77
see also Balance of payments	
Pension funds: investments and assets (a)	20 Aug 76
Regional development grants (q)	12 Aug 77
Research and development expenditure	24 Jun 77 and 1 Jul 77
Retail prices index (m)	19 Aug 77
Retail trades	
sales (m)	9 Sept 77
provisional figures (m)	This week
stocks (m)	19 Aug 77
Royalties: overseas transactions (a)	12 Aug 77
Selective assistance	
section 7 (m)	26 Aug 77
section 7 £10,000 or more (q)	15 Jul 77
section 8 (q)	24 Jun 77
Shipping: nationality of vessels in UK seaborne trade (a)	9 Sept 77
Steel:	
consumption and stocks (q)	1 Apr 77
Stocks	
manufacturers' and distributors' (q)	2 Sept 77
manufacturers' (m)	9 Sept 77
retail (m)	19 Aug 77
Television: overseas payments and earnings (a)	26 Aug 77
Textiles	
activity in the industry (q)	1 Jul 77
carpet sales (m)	22 Jul 77
cotton industry production (m)	26 Aug 77
hosiery production (m)	12 Aug 77
wholesale houses' sales and stocks (m)	2 Sept 77
wool exports (q)	26 Aug 77
wool output (m)	26 Aug 77
Tourism	
overseas travel and tourism (a)	29 Jul 77
overseas travel and tourism (q)	29 Jul 77
Wholesale prices	
average prices of selected commodities (a)	13 May 77
index numbers (m)	19 Aug 77

Organisational information

Commercial representation guide	8 Apr 77
Customs notices of interest to exporters	1 Oct 76
ECGD local offices	12 Aug 77
ECGD lines of credit	1 Apr 77
Government statistics guide	15 Jul 77
Guide to departments	2 Sept 77
OTAR contact points	2 Sept 77
Release dates of economic statistics	26 Aug 77
Trade promotions guide	29 Jul 77

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704	714	724	734	744	754	764	774	784	794	804	814	824	834	844	854	864	874	884	894
705	715	725	735	745	755	765	775	785	795	805	815	825	835	845	855	865	875	885	895
706	716	726	736	746	756	766	776	786	796	806	816	826	836	846	856	866	876	886	896
707	717	727	737	747	757	767	777	787	797	807	817	827	837	847	857	867	877	887	897
708	718	728	738	748	758	768	778	788	798	808	818	828	838	848	858	868	878	888	898
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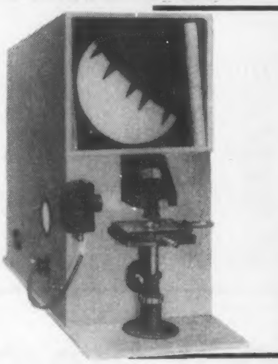

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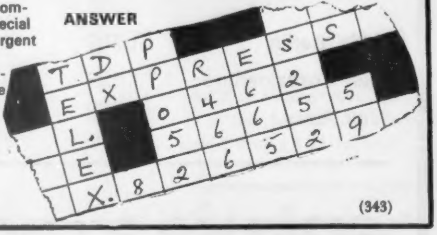

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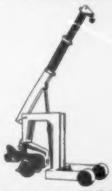

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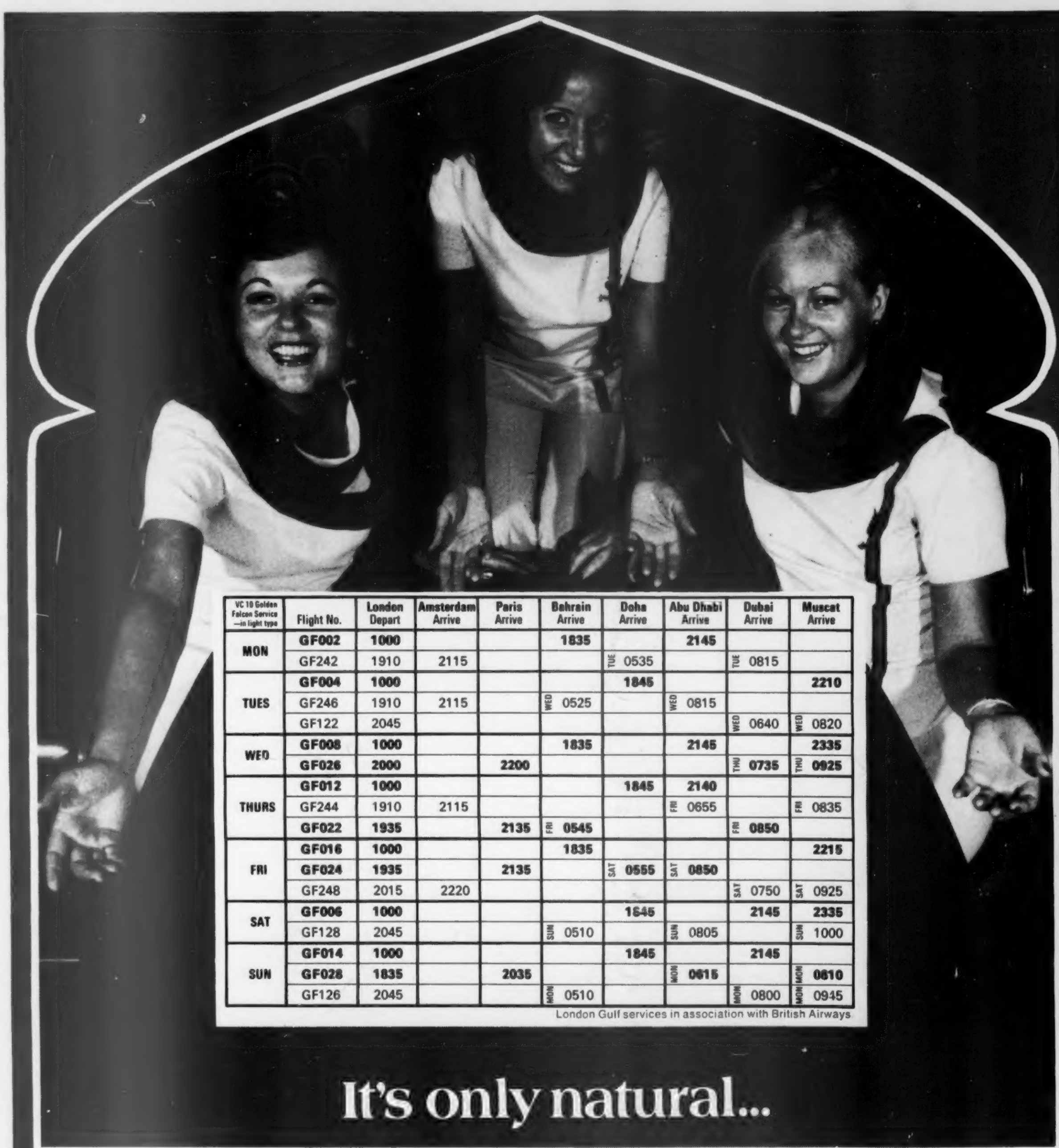

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